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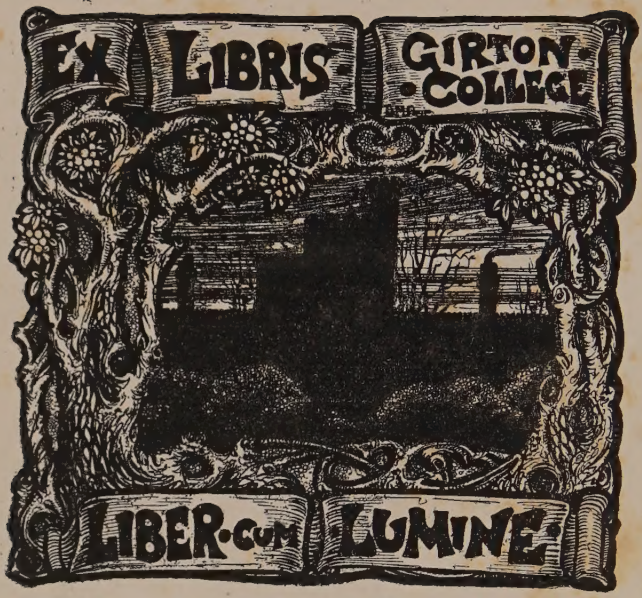

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A STUDY IN REALISM

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C. F. CLAY, MANAGER
LONDON : FETTER LANE, E.C. 4

NEW YORK : THE MACMILLAN CO.
BOMBAY
CALCUTTA } MACMILLAN AND CO., LTD.
MADRAS
TORONTO : THE MACMILLAN CO. OF CANADA, LTD.
TOKYO : MARUZEN-KABUSHIKI-KAISHA

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A STUDY IN REALISM

BY

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PROFESSOR OF LOGIC AND METAPHYSICS IN THE QUEEN'S UNIVERSITY OF BELFAST

CAMBRIDGE
AT THE UNIVERSITY PRESS
1920

To thee, O man, the sun his truth hath given,
The moon hath whisper'd in love her silvery dreams;
Night hath unlockt the starry heaven,
The sea the trust of his streams:
And the rapture of woodland spring
Is stay'd in its flying;
And Death cannot sting
Its beauty undying.

ROBERT BRIDGES.

TO THE MEMORY OF

MY BROTHER

HUGH BLACKHALL LAIRD

SECOND-LIEUTENANT, YORKSHIRE REGIMENT

WHO FELL IN ACTION

AT TRONES WOOD

DURING THE BATTLE OF THE SOMME

8TH JULY, 1916

PREFACE

WHEN I set out to write this book, I meant to give the reader a methodical, brief survey of some of the chief problems in philosophical realism (as I understood it), and to spend most of my labour on certain points in the theory which I found especially perplexing. I thought, indeed, that many of the cardinal features of realism had been investigated so minutely within recent years[1] that I could afford to omit some of them from my discussion and to be very brief in my treatment of certain of the others. *Per contra*, I considered that realists had commonly paid too little attention to certain varieties of knowledge in which, at the first look, other theories seemed better suited to the facts. The creative imagination of the artist, for example, the constructions of science, and even the meanings of perception, might seem to belong to a wholly different order from the simpler ways of apprehending which the realists dissect (I except Mr Alexander, whose *Space, Time, and Deity* had not appeared when I wrote) and I wished to examine whether contrasts of this striking kind were securely established in fact. In other words, I wished to search those other theories on the very ground they had chosen for themselves, feeling convinced that realism was strong enough to occupy it, and knowing, as a thing of course, that if realism were to fail in this enterprise, it could only be a provisional, departmental theory, and not (as it claims to be and as I believed) a final, catholic one.

[1] The theory of relation is an instance.

I never expected, I hope, to do more than an underling's work in so slight an essay upon so large a theme, but, even so, I wish that my confidence had not oozed so persistently as I wrote, and that I could have felt less like a child in chase of a rainbow. And now that the printer has put an end to my struggles with logic and my nibblings of the pen, I am better able to appreciate the yawning chasm between anticipation and achievement. I am doubtful, now, whether I should not have included much that I passed over of set purpose; and I sigh for the equipment which would have enabled me to deal more adequately with many of the problems that have sought me out. On the other hand, I think I may claim that I have faced any of the difficulties I was able to understand, openly enough and squarely; and that I have honestly endeavoured to keep objections in the foreground instead of attempting to gloss them over.

Be that as it may, I make no apology for the spirit of this adventure; and I should not wish to do so, even if such an apology could ever condone the offence. There can be no health in philosophy, I am sure, without continual discussion; and I still believe most firmly that realism is a truly philosophical theory of knowledge, by which I mean that the realists' point of view, literally interpreted and resolutely argued, may be sustained, consistently and without special pleading, throughout the whole wide territory of the theory of knowledge.

No part of this book has been published before; but I have contributed (copiously, I am afraid) to the philosophical journals during the past year or two, and these pages show traces of portions of this published matter and of certain comments upon it. To be more precise, two articles in *Mind* are connected with the subjects of the third and of the eighth

chapters in this book; an article in the *British Journal of Psychology* dealt in advance with some of the problems of the second chapter; the concluding pages of the sixth chapter are tinged with the remembrance of an article I wrote for *The Monist*; and the general argument of the book has a certain affinity with the contentions I put forward in a paper published in the *Proceedings* of the Aristotelian Society. In writing the eighth chapter I had to deal, in part, with the subject-matter of a former book; and I hope I have learned from my critics.

I am most grateful to my father for the pains he has taken in reading the book in proof, and for advising me of many of my mistakes. And, like so many others, I have the pleasant privilege of thanking the Syndics of the Cambridge University Press for the honour they have done me in publishing the book, and of expressing my gratitude to all who may be concerned for the skilful care which has been given to the printing of it. So much in the book is due to what I learned at Cambridge that I may be pardoned, I hope, for finding a peculiar delight in this privilege.

J. L.

July 12, 1920

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CHAPTER I

INTRODUCTION

Comme donc il est clair que je pense, il est clair aussi que je pense à quelque chose, c'est-à-dire, que je connais, et que j'aperçois quelque chose. Car la pensée est essentiellement cela. Et ainsi, ne pouvant y avoir de pensée ou de connaissance sans objet connu, je ne puis non plus me demander à moi-même la raison pourquoi je pense à quelque chose, que pourquoi je pense.

ARNAULD, *Des vrayes et des fausses Idées.*

THERE is no best way of beginning a book, but journeys have to start somehow, and intending travellers expect to be apprised of certain matters before they set out. If you would go with us, gentle reader, you have the right to ask what we intend to discuss, and what our chief assumptions are. You will not ask more than this from an introductory chapter; for you are discerning and experienced, dear sir or madam, and we would not address you if you were not. But you cannot ask less, and we cannot do less than comply.

No philosopher wants to talk about words more than he can help doing in the ordinary way of business, and the retort that philosophy is a wordy business at the best is far too cheap to be worth a glance. There would be some excuse, it is true, and perhaps some little interest, in discussing the various senses in which critics and philosophers have used the word realism. It is a hard-used drudge of a word in art and philosophy (it would turn if a word could), and that is not surprising, for reality is a difficult thing to get away from. Those who try to turn their backs upon it set their faces towards another reality, and those who desert the actual for the ideal soon bestir themselves to prove that this ideal is the only genuine fact. Realists by profession, therefore, are very apt to assume a virtue to which others are equally entitled, and the end of this thing is confusion. If everyone is a realist

after his own fashion, and if the fashions differ, how can the word realism always mean the same thing?

Plainly it has not always meant the same thing in the mouths of philosophers. In mediaeval times, as we all know, realists disputed with conceptualists and nominalists concerning the logical preeminence and the dynamic potency of Universal Forms. There is so little affinity, however, between the mediaeval and the modern usage of the term realism that even the ghost of this ambiguity has ceased to haunt the word. On the other hand the modern usage is amazingly and uncomfortably protean. If the shade of Reid could visit these regions to-day it would greet Mr Prichard of Oxford, but it would be startled by Mr Alexander, bewildered by Mr Russell and distressed by Mr Holt. Indeed one is tempted to think that any realism defined to the quick becomes nothing but the definer's private philosophy, and that the term itself cannot signify more than an attitude and a tendency.

Realism in modern philosophy is born in controversy, and its foe is idealism in some form. History repeats itself in this matter, and there is a very clear similarity between Arnauld's reply to Malebranche, Reid's reply to Berkeley and Hume, and Mr Moore's criticisms of Mr Bradley. On the other hand, the three idealisms thus attacked were, after all, very different philosophies, and the Greek rule that a thing is best known by contrast with its opposite has a very precarious value when the 'opposite' does not remain the same. The choir of heaven and furniture of earth, as Berkeley saw them, look like a cockle-boat on the ocean of the Absolute, and Reid's cudgels use a ruder science than Mr Moore's rapier.

If anyone were to write a history of realism (and there is room for this enterprise) he would have to take Arnauld very seriously. The 'great doctor,' 'le plus savant mortel qui jamais ait écrit' as Boileau's stately epitaph puts it, had too little leisure in his tempestuous career to become a great philosopher. Still, he was eighty-two when he died, and he never understood how anyone could need repose 'when he had all eternity to rest in'; so he found time to take the lion's share in the *Port Royal Logic*, to write the best set of objections to the *Medita-*

tions of Descartes and to correspond doughtily and lengthily with Leibniz. His greatest achievement in philosophy, however, was his criticism of Malebranche in a book which he described (perhaps sincerely) as a 'bagatelle,' and entitled *Des vraies et des fausses Idées.* Even those who, like Sainte Beuve[1], maintain that Arnauld was no philosopher because they detest his *terre-à-terre* methods and love the beauty and polish of Malebranche, have to admit that the rigour, strength, and sureness of Arnauld's logic made him an easy victor. His relentless pursuit of Malebranche's doctrine of representative knowledge is still the classic exposure of that theory and would have killed it if philosophers had learned to avoid the mistakes of their ancestors. What is more, Arnauld laid the foundations of a comprehensive theory of knowledge, all the more interesting on account of its Cartesian assumptions, and on account of the formal precision of its statement.

We must hurry on, however, and avoid history except when we need it. But we shall be the better of a little history, and we may approach our subject by a short consideration of Reid's philosophy.

Reid's earliest and most interesting book was his *Inquiry into the Human Mind on the Principles of Common Sense.* It was a treatise on the problem of perception, and Reid claimed that all previous philosophers had espoused a most vicious fallacy. They all supposed that we perceive, not things themselves, but their representatives; and Reid tried to show that the *rerum simulacra tenuia* of Lucretius, the *species* of the Greeks and the schoolmen, and the 'ideal theory' of Descartes and Locke, Malebranche, Berkeley and Hume were only variants of this radical misconception. According to Reid, every one of these philosophers believed that perception is a kind of contact between mind and thing, so that anything directly perceived must touch the mind in space, and be present with it at the same moment of time. If so, it is clear that what we call the external world cannot be directly perceived. The

[1] Cf. his *Port Royal*, vol. v. p. 449, "Allons! on peut faire d'Arnauld un grand logicien, on en peut faire un cartésien disciple, et le premier entre les disciples; on n'en fera jamais un philosophe."

sun affects our bodies (and perhaps our minds) when rays from it reach us, but the sun itself does not wander into the optic nerve, and there cannot be any instantaneous compresence between the mind and the sun since the rays take time to travel. It follows that the plain man is mistaken when he supposes that he can see the stars and the hills, or feel the support of good shoe leather; and the ancients, Reid argued, failed to notice their total disagreement with common sense simply because they corrected one bad hypothesis with a worse one. They supposed that the circular yellow patch which we see when we look at the sun is the copy or representative of that orb. But the moderns, and especially Berkeley, easily proved that this correcting hypothesis was utterly baseless, and then they were left without any world at all.

These reflections of Reid's go to the heart of the question, and they might well have proved more disturbing to common sense than Reid supposed. The plain man believes, it is true, that he perceives the sun and the earth, but he also believes that the cause of his perceiving is the fact that the sun and the earth affect his eye and his hand. If he believes further, as in fact nine men do out of ten, that all causal action is by contact, he has a very pretty problem on his hands, quite hard enough to gravel most philosophers.

The problem was certainly too hard for many members of the Scottish school which Reid founded. So many Scottish clergymen knew that Hume was wrong, so many Englishmen of Dr Johnson's type found Berkeley's immaterialism absurd, and so very few of them were able to support their convictions by argument that any attempt at a reasoned defence of common sense fell on very quick ears. There is no other explanation for the immediate success of Oswald's ponderous invective or of Beattie's shallow elegance in his *Essay on Truth*. On the other hand, Reid himself was neither a furious zealot nor a plain man in enormous blinkers, and Priestley showed little penetration when he arraigned the whole 'triumvirate' composed of the Glasgow professor, the author of *The Minstrel*, and the minister of Methven. One can sympathise, indeed, with Priestley's annoyance at 'this sudden torrent of nonsense

and abuse that is pouring down upon us from the north' threatening to overturn the sciences and to lead to a state of affairs in which 'the whole business of thinking will be in a manner over, and we shall have nothing to do but to see and believe[1],' for most of the partisans of the new philosophy understood it no better than Burns did when he wrote:

> Philosophers have fought and wrangled
> And mickle Greek and Latin mangled,
> Till, wi' their logic jargon tired
> And in the depth of science mired,
> To common sense they now appeal,
> That wives and wabsters see and feel

and that interpretation is unfair, even to Beattie. Indeed, a grand jury of women and weavers would have been too sophisticated for some of the arguments given in the name of common sense; and some of Reid's appeals to the constitution of human nature are liable, in principle, to the same condemnation. In their essence, however, Reid's investigations were of a wholly different order from this crude acceptance of everyday beliefs, and there is really no excuse for identifying his philosophy, or any realism, with a blind belief in the existence of matter. The theme of his *Inquiry* was restricted, it is true, but the *Inquiry* itself, as Hume said in a letter to Reid, was 'deeply philosophical[2],' and Reid's survey of the mind and the world in his *Intellectual Powers* was both penetrating and comprehensive despite its limitations and its occasional inconsistencies on points of detail.

It is unlikely, indeed, that Reid's influence would have endured so long had there been no salt of philosophy in it. The *Inquiry* was published in 1764, and as late as 1857 Cousin distinctly stated that any radical departure from Reid's philosophy in Aberdeen, Glasgow or Edinburgh would be a European calamity[3]. The great influence of Reid's ideas in France during the first half of the nineteenth century began

[1] *An Examination of Dr Reid's Inquiry, etc.* p. 200 and p. 202.

[2] Hill Burton's *Life and Correspondence of David Hume*, vol. II. pp. 153—154.

[3] In the preface to the third edition of his *Philosophie Écossaise*. Cousin omitted St Andrews from the list because Ferrier was there!

with the chance which led M. Royer-Collard to purchase a copy of the *Inquiry* at a book-stall near the Seine in 1811, and was stimulated both by Hamilton's ostensible discipleship of Reid, and by the desire of the French people to avoid 'quelque importation de la mauvaise métaphysique de l'Allemagne dégénérée[1].' This Franco-Scottish alliance, however, could not have been built wholly upon sand and prejudice, and since Cousin's *Philosophie Écossaise* is still the best commentary on the movement, there is good reason for considering what Cousin said of it.

Cousin claimed that Reid's discoveries in metaphysics were of the same fundamental importance as Adam Smith's in political economy[2], and he found the essence of Reid's discovery and method in a passage at the end of the *Inquiry*. In this passage Reid contrasted the 'way of reflection' with the 'way of analogy.' All previous philosophers, he maintained, chose the 'way of analogy.' They tried to interpret the mind in the light of inappropriate analogies ultimately derived from the contact of bodies in space, and so they went to their destruction. The 'way of reflection,' Reid continued, avoids this initial fallacy. Its beginnings are set in 'reflection,' and that, in its turn, is just accurate attention to the mind itself. When our mental processes are carefully discriminated without prepossessions, and particularly without the prejudice that results from supposing that explanations of the mind must conform to causal and spatial canons which in fact are wholly inapplicable, the chief problems of knowledge solve themselves

[1] Cousin's phrase, *ibid.* There is a curious irony in reading these statements nowadays, and the reader may be interested in the similar attitude of Scottish theologians in those times. "For those who are not inclined to study German philosophy" Dr Chalmers said a few years earlier "I do not recommend that they should suspend for it their ordinary readings. Their very ignorance of the German idealism, the very confinement of their mental philosophy to the doctrine and metaphysics of the Scottish school, are guarantees in themselves against the deleterious influence of these outlandish speculations" (Fraser, *Biographia Philosophica*, p. 74). Chalmers, for his part, preferred 'plain Scottish boluses'; he was convinced that 'the unintelligible does not always imply the solid or even the profound'; and of much more to the same effect. He preferred *Kale* to *Sauerkraut*.

[2] *Philosophie Écossaise*, Avertissement, p. II.

in the sense that accurate observations followed by careful reasoning give an answer that can neither be impugned nor rejected. "When the operations of the mind are exerted, we are conscious of them, and it is in our power to attend to them, and to reflect upon them, until they become familiar objects of thought. This is the only way in which we can form just and accurate notions of those operations[1]."

In itself, this account of the spirit of Reid's enterprise, does not differ importantly from the programme of Locke's *Essay*; and Reid's hint, later on in the same chapter, that this method of direct deduction from the phenomena without analogy or hypothesis had been attended by great success in the domain of physics is thoroughly characteristic of the eighteenth century. The glamour of Newton's achievements led all the philosophers of that age to have great hopes of experimental inquiries into human nature. When Reid was a student in Aberdeen he learnt as much as that from his master Turnbull[2], and the subtitle of Hume's *Treatise* declares it in so many words[3]. There is nothing peculiarly distinctive, therefore, in Reid's conception of his task. His merit lies in the tenacity with which he clung to the phenomena he found, and in his refusal to be fobbed off with anything else.

What, then, are these phenomena? It would seem from the above quotation that Reid took them to be the operations of the mind, or, rather, those mental operations which are specifically concerned with the business of knowing. If so, he deserved great credit for his thorough and searching survey of these complex and varied operations in his *Intellectual Powers*, and for his courage in insisting, to the point of tedium, on the fundamental doctrine that these operations should be studied for themselves alone and should not be supposed to have the characteristics of other things unless and until they

[1] *Inquiry*, Hamilton's edition, p. 201.

[2] George Turnbull (1698—1748) was a regent of Marischal College, Aberdeen, from 1721 till 1727. Reid's name was on his roll in 1726. Turnbull wrote many books, and his *Antient Paintings* is one of the unfortunate tomes which the porter found too heavy in Hogarth's picture.

[3] "A Treatise of Human Nature: Being an Attempt to introduce the experimental Method of Reasoning into Moral Subjects."

have been proved to have them. On the other hand, the bays which he rightly earned on this account would make but half a diadem. The operations of the mind that is bent on knowing are only a part of the relevant phenomena. While there is remembering, supposing and believing of the one part, there are the things remembered, supposed or believed of the other part. Anyone, that is to say, who sets himself to reflect upon the operations of the mind in knowledge, has also to reflect upon the objects before the mind, and anyone who distrusts specious analogies concerning the process of knowing should also distrust elusive and figurative descriptions of the objects which in fact are known. He must examine and consider most scrupulously what it is that we apprehend in any given instance, instead of arguing that we *must* apprehend this or the other kind of thing because our theories of the universe, untested by observation, have it so.

Reid's detailed investigations (and the concluding chapter of the *Inquiry*, for that matter) show that he had grasped this double aspect of his problem very firmly indeed, even if some of his definitions incautiously omit it. If this be allowed, Reid's work as a whole is a sane and resolute application of the fundamental principle of any realism. For realism is a theory of knowledge whose essence is to supply a complete phenomenology of knowing and of things known, or, in other words, to make an accurate and thorough survey both of the processes of knowing and of the objects directly known through these processes.

The trouble is, of course, that so many philosophies make precisely the same claim. Did not Hegel write his *Phenomenology*, and do not James or Bergson or Avenarius give us a philosophy of pure experience, each in his several way? All these philosophers, it would seem, want the same thing and they attain something very different. There must therefore be something peculiar and distinctive in realism to explain its difference from these other philosophies.

This distinctive thing, I suppose, is an affair of assumptions, and, perhaps, of hopes and expectations. The main assumption of realism is that things can be known as they really are. The

secondary, but scarcely less important assumption, is that anything is precisely what it appears to be when sufficient precautions have been taken to avoid confusion between the actual genuine appearance and spurious though very plausible glosses upon it. It follows, of course, that these genuine appearances cannot contradict one another; for things cannot contradict one another. It also follows that true knowledge of this or the other thing need not logically imply the knowledge of all its conditions. To say that things can be known means, of course, that they can be known by us. We, however, are finite beings, and so we cannot hope to know more than a very small part of the infinitude of existence. *Per contra*, we have no right to deny the usual, and, in all probability, the very just belief that everything in the universe has strictly infinite ramifications, so that, if we were sagacious enough, we might pass from cats to clover and from clover to the stars. Similarly we have no right to deny the orthodox assumption of psychology that any piece of thinking is a subtle web whose pattern, perhaps, was woven long before the days of our eolithic ancestors, and whose yarn, even now, is three parts spun in a blind loom of miles of branching nerves. Thus if we know anything as it really is we must be able to know it despite the fact that we do not know much that pertains to it in the way of conditions and connections.

These assumptions distinguish realism very sharply from the Anglo-Hegelian idealism which was lately dominant and still is fashionable in these islands. Even the Oxford idealists, however, might find a meaning for them which they would consider tolerably innocuous and moderately true; and the pragmatists or M. Bergson might contrive to accept them *totidem verbis*. Some further explanation is needed, therefore. The statement that things can be known as they really are is simple in appearance only. We need not stay, it is true, to consider what is meant by a 'thing,' for 'things' in this general statement must clearly be understood in the most general sense possible. Any entity whatsoever that can be apprehended by the mind is a 'thing' in this sense, so that rainbows, dream castles, a yearning for Nirvana, and the null-class are included

in the statement as well as the ships and the rifles which take part in the executive order of the physical world. On the other hand, two points at least require special discussion.

To say that things may be known does not tell us what their reality is. That is a problem for investigation, not something that can be defined in advance, and, of course, there is no implication that knowledge can be satisfied in all its enterprises. There may be many things which we cannot begin to apprehend. A being like Voltaire's Micromégas, for example, with his thousand senses, would be acquainted with more than nine hundred and ninety kinds of sensible qualities from which we are cut off. Again, there are many things of which we know only *that* they are, not *what* they are. The meaning of the statement, then, is only that there is nothing in the relation between the mind and things which, of itself, makes anything inaccessible to knowledge. To put it otherwise, the reason for ignorance never lies in the ineptitude of knowledge. It is due, when it occurs, simply to the empirical fact that the mind either does not apprehend these things, or, for some reason of fact, is not in a position to apprehend them. A blind man should blame his eyes and not his mind when he cannot see the sunset.

What, then, is this knowledge for which so much is claimed? According to M. Bergson, true knowledge is intuition[1], and that, in its turn, is a process of union and becoming. The man who grasps anything by intuition worms his way into the very being of that thing until it is incorporated into him and he into it. We know a thing by becoming it, and it is known by becoming us. Others, again, maintain that knowledge of a thing is the possession of an image or representative of it, so that we know anything when we possess certain pictures or tokens, and not otherwise. The pragmatists, for their part, are shy of such theories because they do not take knowledge very seriously. They consider it a temporary adjustment between ourselves and our environment, a useful compromise which enables us to get along; and from that point of view

[1] See his *Introduction to Metaphysics*, *passim*.

it is only idle fancy to believe that anything could be finally and utterly what we take it to be.

Realists, however, deny all these theories, though they admit a subsidiary and consequential truth to some of them. The first they deny altogether. Knowledge, they think, is never a kind of identity, and they are apt to choose very commonplace illustrations to support their contention. We do not become Niagara by looking at it; we do not become the past by remembering the Great War; we do not become a set of figures by contemplating the multiplication table; and so on. On the contrary, if we became these things we could not know them at all. According to realists, the process of knowledge always implies that the mind is confronted with an object, and always implies that we are never under any conceivable circumstances identical with that object. Even when we apprehend our own experiences, the process of apprehension cannot be identical with the experience which is apprehended.

Realists therefore deny the reality of intuition in M. Bergson's sense but they need not be quite so intransigeant in respect of the other theories. They need not deny that much of our knowledge is merely representative. What they deny is, firstly, that knowledge *means* representation, and secondly that representative knowledge could occur without a direct, non-representative basis. If knowledge meant representation, statues of dead men would know the dead men, and the still pools would know the clouds and the trees which they reflect. Indirect or representative knowledge, again, implies direct acquaintance at some point. The collector who finds an ancient coin, for example, has only an indirect acquaintance with the potentate whose image is stamped upon it, but he is directly acquainted with the coin, and he could not know that the impression stamped upon it really is an image unless he were able to compare *some* portraits with *some* originals from direct acquaintance with both. And realists are in earnest concerning truth and knowledge while pragmatists are not. They need not deny, indeed, that knowledge is useful precisely in proportion as it affords guidance here and now, or that a lucky guess or a vague approximation may often work as well

as, or even better than, well-grounded knowledge. What they are bound to deny is that the mere fact of being guided by ideas, expectations, prejudices and the like is *therefore* knowledge. We work as we can, and how we can; but that does not tell us how or what we know.

To take knowledge seriously is to believe that the appearances presented to the mind can be saved from contradiction if they are attentively and judicially discerned. The phenomenology of knowledge, in other words, in its twofold division into apprehension and thing apprehended, may very well be final truth; and, in particular, it need not be a compromise or only a provisional, approximate makeshift. Indeed, the reasonable hope and expectation of most realists is that certain at least of the tried and tested results of scientific investigation, and some of the most stubborn beliefs of workaday life, will prove to be as true 'in the end' as at any other stage, that is to say they will prove to be quite true. The truth of logic is the crucial test, for if logic chokes you, what will you drink? According to the absolutists and the pragmatists any logical argument and any part of one cannot be quite true because it and its parts are always subject to qualification in a wider context. For realists, on the contrary, each link in a chain of logical argument may be true in its own right and the whole chain, consequently, need not be a thing of cobwebs. The validity of pure mathematics, again, stands or falls with the validity of logic, and a philosophy which is bound to impugn mathematics has little chance of certainty on its own account. It has to substitute something much less certain in the place of mathematical certainty; and the goddess of Reason will see to its undoing. Other beliefs, perhaps, are not so likely to remain unshaken. The belief in matter and the belief in the soul have commonly chaff as well as grain in them, and common sense may not relish the process of winnowing. Reid's sieve, for example, was probably far too wide, and he was more scrupulous than most. But if the world in which we think we live sometimes seems to take wings to itself when even a realistic philosophy startles it, there is a fair presumption that such flights may be short.

Horace was not the first to see that nature has a way of returning after being driven out with a pitchfork, and this furtive habit of nature's partially explains the periodic and independent return of realistic philosophies in modern times. As we have seen, the first of the major realisms was Arnauld's attack on Malebranche, the second was Reid's and the third was the contemporary movement. All these were independent of one another, all attempted to refute a certain variety of idealism, and all, in a sense, strove to rehabilitate familiar ways of thinking at the expense of what they considered to be ungrounded and overweening pretensions on the part of accepted philosophy. The manner of Arnauld's criticism of the theory that 'we see all things in God' may have been somewhat grim and pedestrian, but his thrusts were shrewd, and the main principles of his strategy were very similar to Reid's. Reid, for his part, recoiled from the scepticism in morals, religion and science which he found implicit in the 'way of ideas' despite Berkeley's piety and Locke's cautious tolerance. The contemporary movement, in its turn (including Mr Bertrand Russell's earlier writings though not his later), rejected the conclusions of Absolutism. This modern movement, it is true, did not set out in the first instance to rejuvenate the body of common sense beliefs, although Mr Moore, in his early papers, maintained that 'matter' could be directly perceived, and although Mr Russell sometimes ironically called himself naïve. On the contrary, the main interests of the new realism were sternly logical (except in Oxford where Reid's tradition had remained active), and Mr Russell came to follow Mr Moore because he became convinced that the main assumptions of this realism were 'quite indispensable to any even tolerably satisfactory philosophy of mathematics[1].'

It is plain that any realism of this kind, even if it defends common sense, defends a common sense which is very sophisticated indeed. A philosopher's attitude, in a word, must always differ from the plain man's. The plain man accepts or rejects conclusions *en bloc*. He may be right in this just as he may be right in believing that any form of idealism is only a *fable*

[1] *The Principles of Mathematics*, Preface, p. viii.

convenue, but these wholesale methods are not philosophy. Philosophers look for reasons and (perhaps unfortunately) need the dialectical skill which technical palaestrics in philosophy demand. Judged by this criterion, Arnauld, Reid and many contemporary realists are quite as good philosophers as their opponents.

The fundamental point on which Arnauld, Reid and Mr Moore agree is that the object of true knowledge is in a certain sense independent of our knowing of it. This independence does not mean unrelatedness, for everything has some relations to everything else. It means that the fact of being known does not imply any effect upon the character or existence of the thing which is known. If it did, nothing could be known as it is in itself; for everything in that case would be changed simply because it had become known. All idealists, in spite of their differences, dispute this independence of the objects of knowledge, even when they give a qualified and hesitating blessing to what their opponents call ultimate fact, or when (by a most insidious device) they try to soothe their critics by apparent acquiescence and then divert the argument to another plane. According to realism, the plane of observation and logic is the only possible plane of truth.

I intend to make this assumption in the sequel, and to consider, in some detail, whether it is consistent with the facts of perception, memory, imagination, and similar processes. And I shall try to describe what it is that we perceive or imagine or believe. The general thesis of realism is that knowledge is a kind of discovery in which things are directly revealed or given to the mind. This statement, to be sure, is not very precise, but perhaps it may achieve greater precision as we proceed.

CHAPTER II

THE THINGS WE PERCEIVE

> In my view, a thing is what it looks, and looks what it is.
> JOHN GROTE, *Exploratio Philosophica.*

EVERYBODY knows that philosophers debate interminably whether or not the external world can be directly perceived. Everybody expects a philosopher to talk about this question, just as everybody expects linnets to sing; and most people would add that the *orbis terrarum* need not heed the dispute. The truth is that philosophers have no choice. They are bound to investigate this problem whether they will or no.

The question itself seems very straightforward, and the way of setting about to answer it reasonably clear. We have to ask what perception is and whether it is direct. If it is not direct the question falls; but if it is, the next step in the argument is to enquire what precisely is directly perceived; and when we have satisfied ourselves on this head it only remains to consider whether or not this direct perception is literally the discovery of an external world.

There is little difficulty in recognising what perception is. A man can scarcely miss it, for he perceives every time that he glances at the books on his shelves, or hears a dog barking, or smells the new-mown hay.

Still, some explanations are required. In the first place, it is necessary to distinguish perception from judgments of perception. When a man says 'That's my *Apuleius*,' or 'That's the scent of clover' he not only perceives, but makes a judgment based on perception. Perception is the apprehension of the fact on which such judgments rest, and that is the simplest way of describing it. These judgments are based upon apprehended fact which is present and sensory. Perception is not memory or expectation, and it always implies the use of one or more of the senses.

In the second place, it is usual to distinguish perception

from sensation. This distinction is not so clear as the former, and depends upon two different ways of looking at the matter. According to one of these ways of looking at it, anything perceived is a complicated affair in which several distinct elements can be discerned by analysis. Thus the perceived thing corresponding to the judgment 'That's my dog Argus' certainly contains a structure of space and time, and a manifold of sensory qualities. It would do so even if the Argus perceived at the moment were little more than a series of barks, for these barks would have an Argus-meaning for the dog's master. Sensory elements of this kind, therefore, must be distinguished from the object of integrated perception. Such elements probably do not exist in isolation, but they can be discerned analytically.

The other way of distinguishing sensation from perception does not coincide with this one, and often seems irrelevant. It results from regarding the facts in the light of their development. Adult perception, it is plain, has a history. The infant, looking round him from his cot, does not perceive quite the same things as he will three years later. What a patient perceives when he is recovering from an anaesthetic is a shadowy booming mass, and not the crisp outlines or the clear tones he will notice in half an hour or so. And so on. It would be absurd to suppose, however, that these primitive or confused sensory appearances are identical with the sensory elements of the former argument. On the contrary, the analytic discrimination of these sensory elements only occurs at a highly developed level; and, for the rest, it is hard to see why the history of perception should be allowed to correct or to supersede the description of it. Perception has developed from a more primitive form of apprehension which may, perhaps, be fitly called sensation; but this circumstance seems irrelevant to the description of what perception is. There are no Melchizedeks among us nowadays, without father, without mother, and without descent; but surely we can see for ourselves whether a gardener has done his job without reflecting that he could not have done it if he had not had a grandmother.

Assuming, then, that we know what perception is, we have to ask, in the next place, whether it may be direct; and the answer to this question is not doubtful. Apprehension is always direct unless there are intermediaries between the thing apprehended and the apprehending of it. Now it is plain that we are always confronted with something in perception, and that there need not be anything between our minds and it. The thing which confronts us, to be sure, may also be the cue to association and inference, but that is not to the point. When I perceive, let us say, a coloured patch, I am directly and immediately acquainted with this patch, and no process of argument can overthrow this palpable certainty. Direct perception occurs, therefore. What, then, is directly perceived?

There are many answers to this question, and it would be useless to try to enumerate them all. It seems plain, however, that some of these answers either do not describe perceptible facts at all, or else profess to give information which is wholly additional to anything perceptible. Anyone who maintains, for example, that we perceive brain changes or nervous shocks on the one hand, or 'primary' qualities without 'secondary' on the other, simply does not describe the facts perceived. We do not perceive the pulpy hemispheres within our skulls or any tremors at the synapses between the neurons in the cortex, and we do perceive some part at least of the things we call chairs and tables, stars and medallions. Similarly we do not perceive colourless shapes or soundless vibrations; and those who maintain that sweetness and colour are figments of the mind while figure and motion are immitigable realities have perforce to admit that we cannot perceive the figments without the realities or the realities without the figments. Those again who tell us that we perceive states of our own mind, or of God's mind, or of a cosmic Super-Experience plainly do not describe a fact of direct perception, like the colour saffron or the flavour of pine-apple; and those who say that we perceive matter, and that matter is composed of electrons, do not describe what we perceive but give us an argument in its place. The imperceptible, ultra-microscopic constitution of perceived things may be as they say, but the things we

perceive are macroscopic, and so they must be described in macroscopic terms.

When views of this kind are omitted, the choice of alternatives becomes much more limited, and some of the more important of them may be considered without further parley. I propose to begin by considering a very fashionable theory which I shall call the theory of sensory atomism. According to this theory we perceive sense data and we perceive nothing else.

We arrive at the notion of sense data by paring away some of the imperceptibles which are commonly supposed to belong to perceiving. When the plain man says that he sees a golf ball he might describe his meaning by saying that he perceives a spherical white object which is capable of responding to his attentions in a way that everybody knows well enough. It is clear, however, that when he looks at the golf ball, he cannot perceive, at that moment, what it *would* do *if* he hit it. Golf would be a very different game if he could. It is also clear that he cannot look at every part of the surface of a sphere all at once; and, granting that he could touch the whole surface at once if he grasped the ball, even then he could not touch the interior of it.

The interior, then, and many other parts or qualities which we commonly ascribe to golf balls (not to speak of their uses) are not directly perceived at any one instant of perception. Again, what is perceived by one sense differs from what is perceived by another. The colour of the ball, for instance, is not touched, and it is a commonplace of psychology that sight-space and touch-space are not identical, despite the general similarity between the two. It is impossible to join a visual inch and a tactual one: the objects of touch-space do not grow smaller as they recede: and so on. Hence it would seem that the plain man's idea of a golf ball should really be resolved into a series of visual, tactual, and other separable data. The golf ball of common sense is a collection of perceptible entities, including all the coloured patches which we perceive when we look at it from different angles and positions, the touch-sphere that may be grasped, and the like.

The members of this collection are sense data, and these,

it is claimed, are ultimate facts which cannot be resolved by any alchemy. We are aware of them in perception, and we may discern them readily enough if we take the trouble. Sense data, then—a fleeting yellow patch, a glabrous evanescent contour, and so forth—are what we actually perceive, and, in the last analysis, we perceive nothing else.

It is plain that this theory is amply justified in what it affirms. Sense data are perceived, and no theory which neglects their variations and their differences is worth considering. On the other hand there may be a snare in it concerning what it denies. Granting that we perceive sense data, is it true that we perceive nothing else? Is the theory of sensory atomism a *complete* description of the facts perceived?

The examples previously given are typical of those which are usually selected by the sensory atomists. They ask themselves what we perceive, and they are not content with the answer that we perceive inkstands and pennies, buttercups and pebbles. For they proceed, in their questioning mood, to draw further distinctions. They ask, What is the *seen* inkstand, the *felt* penny, the *smelt* buttercup? And they conclude in the end that the seen inkstand is a shining silvery patch, the felt penny a rounded cool disc, the smelt buttercup a mere aroma, and so of the rest. These patches and odours, therefore, are the ultimate units of their theory.

At this point objections begin to be heard. Ordinary psychologists (sophisticated, perhaps, and pedantic, but honest observers according to their lights) would state in reply that the shining silvery patch is not an ultimate unit but only a part of a perceived whole, that the rounded cool disc is felt along with its surroundings, and so on.

The sensory atomists shrug their shoulders at this objection. Their point is that they certainly do perceive the silvery patch, whatever else they may see at the same time, and they submit that the rest of what they see at any moment is just another set of coloured patches. When they have to meet the objection that the colour of the surroundings certainly modifies the colour of any perceived patch, they reply that this does not matter. They know very well, they say, that a disc which is

grey within a white border may be reddish within a green border; but that is a statement in popular language which really means that the same *stimuli* may give rise to different sense data when the surrounding stimuli are altered. It is not true that one and the same sense datum changes in these cases. On the contrary the sense data become *different* because of the experimental change in the stimuli. In this experiment a grey patch is seen at one time and a reddish patch at another time. And that, precisely, is the sensory atomist's contention.

Serious difficulties remain, however. To begin with, there are the facts of continuous sensory adjustment and discrimination. The examples chosen (principally in the field of vision) are snap-shot glimpses, focussed and discriminated. Careful psychological investigation shows, however, that these snap-shots fluctuate so much that recognisable changes occur within a fraction of a second. Anyone who looks steadily at a brass candlestick, for example, quickly discovers that the sense data are not at all steady. The solid candlestick is a quivering slough in terms of visual sense data. There are perpetual slight oscillations in it, perpetual shifting of discriminated brightness, and so forth.

Now whatever we mean when we say that we perceive a candlestick we certainly do *not* mean that we perceive a fluctuating thing, and there must be some legitimate meaning in our assertion that we perceive a candlestick which is steady. In view of this objection the sensory atomists tell us either that we infer the steadiness or neglect the fluctuations. According to the first of these alternatives, although the sense data perceived are fluctuating, we infer, more or less illegitimately, that the candlestick is steady. According to the other alternative we neglect the fluctuations, so that the candlestick seems to look steady although it does not really look so. And neither alternative is at all satisfactory in view of the original theory.

The inferential theory is not a description of the facts, and it forces the sensory atomists to run with the hare and to hunt with the hounds. There is certainly no conscious inference in the case, and the judgment that we perceive a steady candlestick seems to be a direct transcript of the facts

perceived just as much as the judgment that we perceive a yellow shape. Anyone who argues, therefore, that the yellow shape is given fact and the steadiness spontaneous inference, substitutes a theory for a description, and yet the sensory atomists claim to dispense with everything except incorrigibly hard sense data. They have to shift their ground, therefore, in order to meet the facts, and if they try to argue that the steadiness of the candlestick is an acquired meaning whereas the yellowness is ultimate bare fact, the retort is obvious and crushing. What right have sensory atomists, of all people, to draw this distinction? In all probability the power of discriminating yellow is also acquired; for all the senses, if our evidence can be trusted, spring from a blurred matrix, and it is quite impossible to tell in these cases what precisely is acquired and what is not. To make a beginning with their argument, sensory atomists have to leave hypotheses concerning development on one side, and accept the data which have become hard. The hard fact which is found, expressed as directly as possible, is nothing short of a yellow, steady, solid candlestick.

The alternative of maintaining that these fluctuations are perceived but neglected has the merit of calling attention to facts which are true and important, but it leads, in principle, far beyond the point where sensory atomism commonly stops short. Sensory atomists usually accept Stumpf's argument in favour of undiscriminated differences in sense data. Briefly stated, this argument runs as follows. A weight of four lbs., let us say, may be discriminably different from a weight of four lbs. two oz. but a weight of four lbs. one oz. is not discriminably different (normally) from either of these extremes. Hence the intermediate weight appears to be equal to two things which do not appear to be equal to one another, and the natural if not the inevitable conclusion is that the three sets of sense data are all really different though only two of them appear to be different. It is clear, however, that the principle of this phenomenon reaches very far indeed. As Ruskin tells us, the painter has first to recover the 'natural innocence of the eye' before he can learn to paint. It takes training to see what things really look like, just as it takes a special effort to notice

that the candlestick always fluctuates a little when we look at it steadily. Some psychologists even argue, like Mr Pillsbury[1], that we usually perceive types and not individuals.

To be sure, it is possible to maintain that the painter comes to have different sense data as the result of his ambition to attain a state of innocence, that the candlestick does not fluctuate until we make it do so by bringing the expectations to bear upon it which meddling psychologists have taught us, and that untrained persons really do perceive types and not individuals. If that be true, however, we are far away from the chosen ground of sensory atomism. The sense data which sensory atomists take to be the last results of ruthless attention to fact either disappear in large measure or become exceedingly doubtful from this new standpoint. They are either 'neglected' or non-existent, and many of them are discerned only in the special case in which sensory atomists play tricks with their own perceptual apparatus.

Very similar conclusions follow from considering the margin of perception. Since the sensory atomists have no right to base their theories on anything less than the whole of what we perceive at any moment, they have to reckon with this margin. There are very marked differences, however, between the focussed centre and the penumbral fringe of the visual field at any moment, and their theory seems to have little room, if any, for these differences. Sensory atomists tell us that we perceive a yellow shape, diversely illuminated, whenever we look at what we call a candlestick, but, in fact, we never perceive the candlestick quite alone without surroundings, and the character of these perceived surroundings is very interesting and highly important. *Imprimis* this border or fringe is very little discriminated and, except by a special effort, is scarcely discriminated at all towards its periphery. *Amplius*, it has no crisp boundary although it does not stretch out to infinity. *Praeterea*, when there is a change in attention (or in sensory adjustment, or otherwise), focus and fringe change places, and yet this difference is commonly neglected

[1] *The Psychology of Reasoning*, especially pp. 73 *sqq*. referring to Lehmann's experiments, and to Dr Hayden's and Schumann's.

and is never taken to mean that a new thing has come into being. *Adhuc*, the margin, in critical respects, contributes to the meaning of the focussed, central area.

Let us suppose, for instance, that the candlestick is in the centre of our visual field. In that case the candlestick is localised as well as coloured and shapely. This localisation is relative to the rest of the perceived field and to the body of the percipient (in so far as he is aware of his body), and we shall consider some of the implications of this circumstance before long. For the moment the important point to notice is that the localisation is perceived as directly as the colour or the shape. *Because* the candlestick is localised the margin counts as well as the centre, and yet the sensory atomists' description of sense data takes account of nothing except the yellow shape in the centre.

The margin, to be sure, is usually neglected in perception, but it is perceived none the less, and it is quite absurd to describe the field of vision as if it were a mosaic of sense data which appear the same whether they are focussed or not. We do not, indeed, perceive a world all at once, but we certainly do perceive an expansive pattern, clear in the centre and nebulous towards its misty border. Moreover, when we alter our attention within this perceived expanse, we perceive a difference of outline and emphasis within the same field and not two different sense data (as the sensory atomists aver). Again, the very nebulousness of the margin is rich in consequences. If, for example, we turn our eyes from the candlestick on the mantelpiece to the tiles of the fire-place, something more has happened than a mere change of emphasis within the same field; for the passage of our eyes continuously annexes a new field only partially coincident with the old one. What was formerly central is now marginal, what was formerly part of the margin is now the centre, and the new margin has come to include something that was previously not perceived *at all*. Yet because the earlier field had no crisply defined boundaries we always suppose that we are exploring *more* of the same world, and not that we have come to perceive a fresh sense datum part of which is similar to a former one; and this reference to a world beyond the expanse directly

perceived at any moment is always part of the meaning of anything whatever that we perceive.

Furthermore, the sensory atomists, in distinguishing so trenchantly between the sense data of sight, touch, sound and the rest, omit the crucial factor which psychologists call 'complication,' and the reader, in his charity, must pardon me for introducing a little elementary psychology at this point. When a critic talks of the 'tactile values' of a painting, or a schoolboy says that ice looks cold, some cantankerous purists might point out that neither coldness nor tactile values can, strictly speaking, be *seen*, and consequently that the correct way of putting it is to say that the coldness or the tactile values are inferred from what is seen or associated with it. In point of fact, however, these purists would be wrong. The coldness of the snow is perceived at a distance just as directly and immediately as its whiteness or its lustre, for it is part of the meaning of the wintry landscape which is perceived. The visual sense datum is as much a *sign* as a *fact* and it is always apprehended so. The meaning has been acquired, to be sure, but we perceive it when it is acquired. I do not mean, of course, that we perceive what is *meant* precisely in the way in which we perceive meaning. A sign is never what it signifies. I mean that we perceive *significance*; and, indeed, that we always perceive *sign-facts*, not sense data devoid of meaning. The snow has a cold look, and this cold look belongs to it in precisely the same sense as its surface or shade, its brightness or its colour.

This example has been chosen from the sense of sight, and the other senses make the argument still more forcible. The blending of taste and smell is so notorious that it is manifestly absurd to analyse the taste of roast beef into so many data of sweetness and sourness *plus* the characteristic flavour of that succulent substance. Again, this blending of sensory qualities is so hopelessly embrangled with tactual and even with visual meaning that it is impossible to say whether tastes and smells are literally extended or merely correlated with extended things. Indeed, it is impossible to say whether these qualities appear to be 'external' or not. No one is likely to be in two minds on the question whether the yellowish

liquid that he calls whisky is inside his body or outside it, but anyone may wonder interminably whether the smell of the whisky is inside the glass or inside his nostrils, and anyone may argue without end whether the shrewd wind is itself chill or only makes human beings feel so. The significance of these sign-facts is so thoroughly wrapped up in them that it is useless to try to uncover their signlessness.

Our conclusion, then, is that we perceive more than mere sense data as these are commonly described by the sensory atomists. We always perceive meaningful data which are as much signs as facts. It would be a mistake, however, to treat the objects of perception as mere signs, although most of the scholastics and many of the moderns have done so. Particular shapes and colours (to mention no others) are directly perceived, and, when perceived, are unquestionable facts. On the other hand they also signify a wider context in time, space and material. They are signs, although they are not *mere* signs; and their significance is not extraneous or adventitious to their perceptible being.

Dr Ward's theory[1] that we perceive segregated portions of a presentational continuum stands at the opposite pole from sensory atomism. According to this view, the mind (racial or individual, human or non-human) is confronted initially with a sensory totality in which it does not discriminate extension or duration, colour or sound. Speedily, however, it comes to discriminate within this totality; patterns begin to show themselves; and, finally, this primitive sensory vat is transformed into a recognisable and even into a solid world. This development takes place through the segregation of what was originally continuous, not through the aggregation of ultimately discrete particles. Even the appearance of discreteness at the end is only partial because the fringe of any perceived thing melts into the continuum and mingles with it.

This theory gives a very good account of perceptual development, and also keeps close to the facts of developed perception. Some writers, it is true, speak as if no one except a mathe-

[1] *Psychological Principles*, especially chapter IV.

matician had the right to speak of continuity at all. Continuity, according to Mr Russell, is just a kind of fog in which those who are not mathematicians love to dwell[1]. It is difficult to see, however, how a better word could be chosen to describe the facts which sensory atomists (as we have seen) neglect, and those who use it as a descriptive term need not quarrel with the mathematicians. Indeed they need not enquire very closely whether their 'continuum' is 'continuous' or only 'compact' in the strict mathematical sense. In a word, there is continuity in what we perceive, and there is continuity between what we perceive at any moment and its meaning in terms of a wider context. What is more, our usual notions of space and time are in all probability too discrete for the facts of perception. Recent enquiries, and recent theories of natural knowledge point to the conclusion that space *and* time, as currently conceived, are cumbrous and inexact descriptions of the perceived phenomena[2]. We perceive spatio-temporal *events* whose space-time is a single fact more intimately joined and also more fluid than either common sense or traditional physics is accustomed to admit.

However that may be, it is plain that Dr Ward's theory would be misleading without a certain reservation. The world as a whole is never perceived either at the beginning or at the end of psychological development. What we perceive is always a shifting fragment with tenuous edges. These fragments, it is true, are apprehended by creatures who are always immersed in the sea of being, and are therefore felt to be *only* fragments. Moreover, this initial and continuing fragmentariness of our percepts may be the basis, in the end, of our conviction of the existence of a single world. This world, however, cannot be perceived in even a vestige of its entirety. We perceive a minute patch of it at the best, and the world as a whole, so far as perception goes, is only a signified thing clinging with a tag of meaning to the fragments we perceive.

Again we must beware of neglecting the facts of perception in our zeal to pave the way for a theory of development. Even

[1] *Introduction to Mathematical Philosophy*, p. 105.

[2] See *e.g.* Whitehead's *Principles of Natural Knowledge*, *passim*.

if the beginnings of the presentational continuum were as vague as the sensations of a half-stunned crayfish, there is no such vagueness in the normal perception of men and women, or of the higher animals. The eagle and the gazelle, it is true, cannot tell us what they perceive, or do not care to do so. But men and women do tell us, and they say that they perceive such things as gargoyles and cathedrals, twinkling stars and a gibbous moon. These statements are judgments based on perception, and it is worth while enquiring, once again, whether judgments of that kind are faithful accounts of the facts directly perceived.

As we have seen, these statements seem to indicate that physical things interpreted after the fashion of common sense are directly perceived. It is not difficult to decipher the main outlines of this common sense interpretation. The physical things of common sense differ from scientific objects on the one hand, and from a collection of sense data on the other. Unlike electrons and ions, physical things are supposed to be perceptible and to be characterised by all the sensible qualities. One and the same bar of common soap, on this interpretation, can be smelt and touched and seen, whereas ions and electrons are imperceptible, and are not credited with any properties except the spatial and temporal qualities required for the equations of physics. For a different reason the physical things of common sense are not merely sense data or collections of them. They are *continuants* in time, and sense data are fleeting intermittent things. They preserve the same recognisable spatial contour for a considerable time, whereas the sensory atomists give a mere parody of this statement when they say, instead, that a given set of intermittent sense data are broadly similar in respect of outline. Physical things, again, are supposed to have causal relations with other physical things. Soap dissolves in water, and it will stop a leak in a gas pipe. This language could scarcely be used of mere sense data.

Our previous argument has shown that the account of the sensory atomists is true in most particulars but incomplete because it does not mention meaning, and because meaning is directly perceptible just like colour and sound. It follows that

common sense descriptions are much too hasty. According to common sense, a penny is a circular object; but what we directly perceive in the penny when we look at it from different positions is a series of ellipses of varying eccentricity, and it is impossible to deny this and also to accept the facts of direct perception. Again, it is true that our sense data fluctuate when we perceive, as we say, a steady candlestick, and it can be proved to demonstration that sight-space and touch-space are not literally identical. It is useless to suppose, therefore, that these differences and these fluctuations can be either ignored or repudiated in any faithful account of the facts of direct perception. Moreover, the case against this hasty common sense interpretation seems to become indefinitely stronger when we consider the variations which are possible in the perceptions of one and the same person, or, again, the variations between different human beings and between mankind and the animals. The field that is green to Hodge in his normal condition is yellow to him when he is jaundiced, and has many colours when he is intoxicated. No one can reasonably suppose that a man and a dog are aware of precisely the same odours when they sniff, as we say, the same piece of meat. Bacon and eggs taste very differently to those who have a cold in the head and to those who have not. A colour-blind man and a normal woman do not perceive precisely the same scarlet patch when they look at geraniums in flower. These examples could be multiplied indefinitely, and no one who has read Berkeley's *Dialogues between Hylas and Philonous* has any shred of excuse for neglecting them. 'You may draw as many absurd consequences as you please,' poor Hylas complained, 'and endeavour to perplex the plainest things, but you shall never persuade me out of my senses. I clearly understand my own meaning.' 'I wish you would make me understand it too,' said Philonous[1].

The truth is that these variable, fluctuating, intermittent sense data are not the whole of what we perceive, for they are always suffused with meaning when we perceive them; and that, in principle, solves the problem. Our glimpses of the

[1] *Dialogues*, Fraser's edition, vol. I. p. 393.

candlestick are not steady like the candlestick, but they have a meaning which we interpret in terms of steadiness. According to one way of it, an emmetropic and an astigmatic pair of eyes cannot perceive the same thing. According to another way of it, they can, because there is a common meaning and an identical reference in the things they perceive. To say that we cannot perceive continuants intermittently is true on the surface, but on the surface only; for continuants are *conveyed* to us through the intrinsic meanings of what we perceive intermittently. What is more, anything that we perceive is part of a world, and this meaning is found in it unalterably. Sense data are sign-facts and they signify continuants in a world.

What must be avoided is the confusion between the meanings which we perceive and our reflective judgments concerning them. To borrow a phrase from William James, our perceived meanings are raw and unverbalised, and even the simplest of the plain man's judgments of perception implies a system of meanings which need not be identical with the unverbalised meanings of perception. Common sense is unreflecting on the whole, and therefore its reflective theories are not very likely to be good ones. Clearly, therefore, there is nothing to prevent science or philosophy from being better interpreters of the plain man's meaning in perception than the plain man himself. More especially, this recognition of perceptual meanings does not imply any particular theory of space or time or the world. To speak of the spatial meaning which clings to a patch of colour, for example, does not imply any one interpretation of space. The phrase simply describes the kind of meaning, whatever it may be, which a man sees when he prods a hole with his dibble to plant a cabbage, or looks before he leaps. To say that we perceive continuants is only the beginning of a theory concerning what these continuants are, and to say that these continuants belong to a world is not a cosmology, or even an articulate theory of the world itself. The point is that the meanings perceived in any instance of perception are of the type indicated by these expressions. In other words, the work of reflection in these matters is not primarily an addition to

the facts of perception or a wholly novel species of interpretation. It is an attempt to clarify and to continue those unverbalised perceived meanings which are always given and dare not be overlooked.

Assuming, then, that the things we directly perceive are the sign-facts described above, our next and most important question is the bearing of this conclusion on the theory of realism. Realists maintain that perception is the discovery of a world independent of the perceiver. Now, whatever is discovered is given or found. We may ask, therefore, whether the sign-facts which we perceive are either given or found.

According to many writers it is absurd to say that perceived things are given or found, since all perceived things are products of the nervous system. This argument, however, plainly contains a fallacy. The nervous system itself is also perceived, and we have to trust our own eyes before we have the right to trust anyone's description of our ocular apparatus. That would be true even if we were able to observe our own retinae, or optic nerves, or brain; and we cannot, in fact, do this. Our evidence for the existence or for the character of the nervous system depends upon our perception of other people's nerves and their arborescent entanglements. We must trust perception, therefore, to make a beginning with this theory, and if we have the right to trust our observations of the nerves upon the dissecting table, no possible theory can consistently deny that we have an equal right to trust our observations of the dissecting table itself. We cannot see the nerves better than we see the knife, and therefore if we know that there are nerves we also know that there is a knife. It is also true, to be sure, that when we assume that we can perceive things, we find that we can perceive the nerves on the dissecting table as well, and we are then in a position to infer, by exceedingly probable reasoning, that the nervous system must be stimulated whenever perception occurs. The most that can be extracted from this circumstance, however, is that the nervous system is an indispensable instrument for perceiving; and this harmless truism is consistent with any theory.

According to a much more important set of arguments,

perception can never be the literal discovery of an independent world because the process of perceiving always permeates and transfigures the perceived thing. Perceived things cannot be given to the mind because they always have a meaning, and this meaning must be contributed by the mind.

Some writers maintain that what is given to the mind is a bare stimulus, a naked shock or tremor of the nerves, without any clothing of space or time or sensory quality. This theory, however, is liable, in principle, to the same objections as the former. We have to trust our developed perceptions before we can observe or infer the existence of this naked shock or tremor, and this theory, consequently, may be left by the wayside along with the other one to comfort it with the fond recollections of a vicious circle.

It might still be argued, however, that even the rudiments of perception suffice to vanquish this *circulus in probando*, and that if the human mind were given something as rudimentary as the crustacean perceptions of a lobster it might be capable of weaving our present system of acquired meaning into these perceptions. And then the fight begins. When anything is given to the mind, we are told, the mind must be wholly receptive. We have lost this innocence long ago, and the mind clothes everything it receives with sophisticated and elaborate raiment. Whatever is perceived is suffused with acquired meaning, and what is given cannot be also acquired.

There are two answers to this argument, and these, together, seem conclusive. In the first place there is no reason why a thing which is given, found, or discovered must therefore be supposed to be passively received. Many discoveries require painful effort, and the discoveries of perception seem to follow the same law although we may have forgotten our infantile labours in this direction. Attending, discriminating, inhibiting the irrelevant and organising our mental resources are processes which must be performed with the sweat of our minds, and the theory of realism does not contain the faintest implication to the contrary. In the second place, if perception is admitted to be discovery at any stage, there seems to be no good reason why it should be less of a discovery at an advanced

stage of development than at a more primitive level. The development may be progressive discovery, and the acquired meaning ascertained, not imposed.

Indeed, there seems to be no good reason for maintaining that acquired meaning is contributed by the mind, unless it is argued that all meaning is so contributed. That, however, is precisely the contention of many philosophers, and these philosophers conclude in consequence that since a meaningless thing is nothing to the mind there is no possibility of discerning the given as it is in itself. This argument is enormously important if it is true, and so it must be considered very carefully.

The principal reasons in its favour are three in number, the dogmatic, the intuitive and the critical; and I shall deal with them in turn.

The dogmatic argument consists of the assertion that all meaning is synthesis, and that synthesis cannot be given. All synthesis, it is argued, is spontaneous. It can only be thought, not perceived, and it is the work of the individual mind, or of Cosmic Reason, or of Absolute Spirit.

This dogmatic assumption permeates Kant's position and that of his successors. It has a much older history, however, and Kant himself seems to have inherited his theory of a spontaneous, non-sensuous, active Reason from the scholastics who themselves traced it back to Aristotle. In modern times Green and Lotze do fealty to the dogma in the special form which maintains that meaning is synthesis, that synthesis is relating, and that all relating is the work which the mind does in making a finished product out of raw sensory material which, in its turn, is either given to the mind in feeling, or generated from the mind itself. It is unfortunate from one point of view, and instructive from another, that Kant's critical philosophy was not critical enough to examine this fetish. Meaning, it is clear, implies togetherness, but things may be found together as well as put together. A cow's tail is together with the cow, but if anyone was responsible for this conjunction it was God. It is certainly true that there cannot be meaning without connection. Utter isolation kills meaning. But the

assumption that connection is only the mind's carpentry, or that it cannot be discovered in things, is a mere dogma which should never have lived. We should pray for peace to its ashes, for its ghost, even now, is horribly malignant.

According to the intuitive argument, it is self-evident that meaning is wholly an affair of the mind. Things exist but they do not mean; and that is an end of the matter.

The plausibility of this argument depends on its ambiguity. 'Meaning' is sometimes synonymous with intention. My meaning is what I intend to convey to myself or to some other person. Now my intentions, of course, are my own, but the facts I intend to indicate need not be mental at all. And when we say that such and such a perceived thing means so and so our intention is to express a certain state of the perceived facts, *i.e.* the way in which some fact or aspect of fact indicates something else in the facts. To be sure, it takes a mind to apprehend this indication just as it takes a mind to apprehend at all; but there is no reason in the nature of things why this indication should be less radically objective than anything else that can be apprehended.

The critical argument puts these general issues to one side and goes straight to the facts of knowing. These facts, it is claimed, show to demonstration that all meaning is mental. Our meanings, indeed, are wholly personal. Things, it is true, are connected with one another, but it is a mere accident if any of these connections coincide with what we call meaning. It might be otherwise if signs had anything in common with the things they signify or if these twain necessarily obeyed the same laws or had any recognisable affinity; but, as it is, none of these conditions holds.

The written letters 'fireship' signify a certain noise; and this noise signifies a thing which is highly combustible and very dangerous. The letters, however, are utterly different from the sound, and the sound itself is utterly different from the thing it signifies. It would be inconceivable otherwise how such different sounds as 'fireship' in English and 'brûlot' in French should signify the same thing. Thus the nature of a sign, its laws and connection, may differ completely from those

of the thing signified. The laws of words are the laws of sound and of the human pharynx. The laws of things are what you will. And the connection between these signs and things is wholly arbitrary. Nothing but a mind can give them meaning.

The theory of symbolism is a complicated business, and we might simplify our thesis by maintaining that perceptual significance is an affair of 'natural' signs and not of arbitrary ones (as Berkeley supposed when he described perception as a divine visual language). It is better, however, to take the case at its strongest, for if even the connection between language and things is not peculiarly mental in its essence, there is not much likelihood that any other sort of meaning must be mental.

A sign is something which is capable of doing duty for the thing it signifies, and it is interesting to consider the psychological conditions of the mind's use of signs. Nothing can become a sign unless it has been experienced along with some other thing. When it has been experienced in this way, it may stand for, or be a substitute for, that other thing or for the whole composed of itself and the other thing. The most useful kind of signs are those which permit of the same logical deductions as the wholes for which they stand. Another kind of sign, also very useful at times, is that which, like the proverbial knot in a handkerchief, leads the mind to think, by association, of the event which was thought of when the knot was tied.

The usefulness of a sign lies in the ease and celerity with which it can be used as a substitute. The more time gained, the better the sign. On the other hand, these substitutes do the same kind of work as the things they signify: they are quicker at it; that is all. If we use a sign because it has the same logical properties as the things it signifies, the important point to consider is what these logical properties are. If they are mental, the sign must needs be mental; and if not, not. If, again, this connection is illogical, like mere association, we have to ask whether the things we associate are necessarily mental. If they are, this kind of meaning must be mental; and if not, not.

Now it is clear that logical relations are not peculiarly

mental. The idea that they are depends upon the antiquated prejudice that everything is mental which cannot be seen or touched. Again it is plain that we associate things. We associate pony-phaetons with old ladies because we have often seen old ladies driving in them. If pony-phaetons are not mental they do not become mental by standing for old ladies. And the old ladies need not become mental either.

The only serious difficulty in the case is that mere conjunction casually experienced may serve as well as a settled, intrinsic conjunction in things. Sunday may stand for gloom and overfeeding to me, because gloom and overfeeding used to be my lot on that day of the week. That was a settled conjunction in my life. On the other hand the *name* Sunday has no intrinsic connection with the first day of the week. The prehistoric inventor of the name must simply have thought of name and day together, and other people must have accepted the conjunction because they thought that name as good as any other. Even in that case, however, the name and the day are things which are experienced together, and neither of them is part of the mental process of experiencing. The mere conjunction of the two in time makes it possible for one of them to be the sign of the other—to mean that other—but in the original conjunction both were things which were apprehended; and the sign, when it is used, is an apprehended thing too. The mind takes a cue from it and comes to think of something else, but the fact of meaning does not in the least annul the distinction between the process of thinking and the things of which we think.

We may conclude, then, that even in the most arbitrary cases, meaning or significance is something thought of, not part of the mental process of thinking. Meaning may need a mind but it is not mental. And the opposite view is untenable. Even if meaning were a mental product, the mind would have to apprehend this product, and the product given to the mind in apprehension would be an apprehended thing just as surely as if the mind had nothing to do with the production of it. Knowing is never making. It is just knowing.

For clearness' sake we may now review the foregoing

argument. Perception is the awareness of a sensory complex which confronts the mind directly. This complex is a sign-fact which has meaning or significance as well as extension, duration, colour, or tone, and this meaning or significance belongs to it quite as indefeasibly as hardness, extension and the rest. In most cases (if not in all) the sign-fact perceived has, broadly speaking, the kind of meaning which is elaborated into the common sense notion of a physical thing. At any rate a continuant is signified, and the continuants perceived indicate other continuants and furnish an analogue, in perception, to what common sense calls the connection of physical things in a physical world. That is what we perceive, and the arguments which attempt to show that these perceived things cannot really be discovered because they are not given or because their meaning is somehow a mental thing are one and all mistaken.

This explanation is certain to give rise to the impatient question whether or not 'matter' is directly perceived. Even the most impatient critic, however, must surely admit that this question is not so simple as it looks. What are we to make, for instance, of the palpable differences between what the plain man calls matter, and the elaborately different world described in scientific theories of the constitution of matter? The rocks and trees of common sense are relatively constant as the ages advance, but the scientific theories of them are constantly changing, and are very frequently in solution. This relative finality of perception, however, may perhaps be unimportant; for science, very likely, becomes progressively more penetrating while vision and hearing do not; and there may, after all, be sufficient affinity between the common sense point of view and the point of view of science to justify the traditional attitude in which common sense boggles at philosophy and meekly accepts whatever science has to say. On the other hand, we have seen already that there is at least one difference between common sense and the prevailing scientific theories which cannot be passed over lightly. Scientific tradition purges away the secondary qualities of physical things in a ruthless electuary, and crams their interstices with imper-

ceptible substances. As a general rule we are willing enough to accept these additions, for we take little account of 'Occam's razor,' and we know, like a friend of our youth, that 'our wision's limited'; but we may reasonably complain of being forced to accept less than nature offers us, and that is why the plain man himself often makes a wry face at the Democritus' purge which banishes colour, sound and odour (along with the rest of the secondary qualities) from his world.

Indeed, it is manifest that the secondary qualities are directly perceived in the same sense as the primary, and it is abundantly clear that any arguments which discredit the secondary qualities tell equally against the primary. Science therefore must accept one or other of two alternatives. Either the 'matter' of scientific theory is wholly imperceptible, or it has secondary qualities as well as primary. In the former case there is complete disagreement between science and common sense, and science itself is in a quandary since the only evidence for the existence of 'matter' is the evidence of perception. On the latter alternative, scientists are at liberty to argue that secondary qualities are secondary only in the sense that they are not needed in scientific descriptions and formulae. The explanation of colour may be given in terms of colourless vibrations; and so on. In that case, science and common sense, with a little good will, may contrive to adjust their differences.

The philosopher's problem concerns this world of perceptible matter, spatial, temporal, coloured, resonant and tactile. Is there such a world? Can it, literally and directly, be perceived as it is in itself? Could it exist before the race of sentient beings began, and after they have ceased to be? Is velvet really black, and smooth, and glossy? Could a rose be fragrant still in an unpeopled waste? And common sense expects a plain answer to its plain question.

A plain question is a euphemism for the fallacy of many questions, and a simple 'yes' or 'no' in these matters is worth nothing at all. Any theory worth a peppercorn must take account of the difficulties, and it is but trifling with the matter to speak of the direct perception of an independent world

without considering the differences between one man's perceptions at different times or between different percipients. Do I and my neighbour and my dog perceive the same rainbow? The final answer to this seemingly simple question is elusive enough to justify the northern legend that truth lies buried at the end of a rainbow.

There seem to be two principal ways of meeting these difficulties. According to the first of them, the difficulties arise from a false conception of thinghood. We say that a penny is round but that it often appears to be elliptical, that the trail which the bloodhound pursues only appears to be odourless to his human followers, that one of Dalton's celebrated stockings was red and the other green although both seemed to have the same colour to him because he was colour blind. Indeed, we might even say that *because* these things are so and so, they must appear otherwise under certain conditions. We assume, that is to say, that the penny has just one shape and each of the stockings just one colour, but we should reverse these assumptions according to the theory we are now considering. If we do not, it is argued, our perplexities become hopeless. Many shapes of the penny, several colours of the stockings, are perceived in fact. Why then should we conclude that all save one are illusory appearances? And when we have come to see that there is really no justification for assigning a privileged position to one shape or to one colour it seems difficult to stop short of the conclusion that all percepts are but appearances, and that physical things are never perceived as they are in themselves.

When the ordinary conception of thinghood is reversed, another possibility appears. Instead of supposing that the penny has just one shape, let us suppose that it is always the whole collection of shapes which would appear from different points of view; and so in the other cases. On this hypothesis, what we perceive at any moment is just one selection from the countless host of appearances which together are the thing; and therefore it is easy to explain the different appearances which things present to different people or to the same person at different times. For each of these selections is a different

selection, and the thing itself is rich enough to contain all possible selections. This theory holds good, even in the cases in which the different selections seem to contradict one another. To most of us the elliptical shape of the penny seems to contradict the roundness which we also attribute to it, for we are accustomed to suppose that round things and elliptical ones cannot occupy the same space; and similarly the brown tint which Dalton saw in both of his stockings seems to distort the red of the one and the green of the other. This theory, however, is ready with its answer; for, according to it, what we call one space is really a collection of spaces. *The* roundness of the penny, it maintains, is an inaccurate expression which is justified by its convenience only. The phrase ought to mean (and really does mean) that series of perceptible shapes which approximates in a certain determinate fashion to a limit of circularity. There is no difficulty in defining this series in such a way as to distinguish it clearly from other series which approximate towards an oval or an oblong limit, and so the shape of every penny differs from the shape of every egg or every envelope. The supposed distortion, therefore, is due to a false conception of what one shape, one colour, and the like, really mean.

In some ways common sense might welcome this theory, and frankly prefer it to the usual ways of speaking. The plain man believes, for example, that he can perceive his house just as it really is. But although his house exists as a whole he never perceives it as a whole. The most he can hope to do is to catch a series of glimpses as he walks round it. Now if each of these glimpses is really a part of the house, logic compels the plain man to admit that the house at any moment contains all the glimpses which he might successively observe during his perambulations. The house, to be sure, is more than the sum of these aspects, but it cannot be less than the sum of them; and that is the substance of the contention before us.

At the same time some further implications of the theory might be welcomed less cordially. If our hypothetical friend went up in an aeroplane and looked down at his house, this odd aspect would also be part of what the house always is. If, descending from the areoplane, he felt giddy and saw the house

reeling before him, this reeling aspect would also be part of what the house always is, and, by the same argument, the house always is precisely what dogs and rats and mice perceive in it whenever they happen to use their senses. These consequences may not lead to contradiction, but they certainly seem very strange.

Again, there is a difficulty about meaning. The theory we are considering is usually expressed in the language of sensory atomism, but we have already seen that any sense datum is tinged with a meaning beyond itself. If this meaning were drawn out explicitly it might, indeed, result in the apprehension of other determinate sense data, but, in the general case, that is not so. The cold look of the ice, for example, does not usually lead to any reinstatement of the feelings of cold. It is just a tinge in the look of the ice. These tinges of meaning belong to anything perceived; but it is strange, perhaps, to conclude that they are literally part of the thing's independent reality. To ignore them, on the other hand, robs perception of three parts of its powers.

And here another difficulty emerges, far more serious. Undoubtedly we consider some of our perceptions better or more adequate than others. Attentive scrutiny of a flower is better than a casual glance; and when the steel worker, to borrow an illustration of Dr Ward's, perceives many tints in the flame which is only a uniform glow to others, we should commonly hold that his perception is therefore more adequate. We believe that a dog smells better than we do and that we see better than a dog. Anyone, indeed, who admits that the senses are educable is plainly of this opinion.

The theory before us might be able to admit the truth of this belief provided that it were interpreted in some tortured or Pickwickian sense. 'More adequate,' for example, might be taken to mean 'more effective for practical purposes.' This theory however must deny *in toto* that anything directly perceived is, in itself, better or more adequate than any other; and we all believe precisely the contrary in fact. According to the theory before us, the margin of perception must, in its mere marginal outlines, be immitigable objective fact in the

same sense as the centre. For it is perceived; and perception, *ex hypothesi*, is only a selection from what always is. We all believe, on the contrary, that we perceive a thing better when we focus it. If this belief has to be relinquished there seems to be no good reason for clinging to any other belief about perception, and we might as well surrender perception to the sceptics as defend it at such a cost.

Some perceptions, therefore, are intrinsically better than others. Improvement in perception, however, is not merely a process of coming to discriminate more qualities, it often involves the transformation of the whole texture of the perceived thing. Consequently it is impossible to maintain that perception is always a faithful witness, or that anything perceived is only a selection of something which, precisely as it appears to perception, always belongs to an independent world.

This conclusion points towards the alternative method of attempting to reconcile these apparent contradictions. This alternative is to maintain that the material world is, broadly speaking, what it is perceived to be, although there is much error, and enormous risk of error, in our perception. According to this view, the world is really independent of the percipient, and it is really spatial, temporal, coloured, and resonant. We see colours and we hear sounds, for the most part, just as they really are; and we can generally overcome our errors by closer attention, or allow for them by careful reflection.

This alternative seems provisional and unsatisfactory to some philosophers, and impossible to others. We may consider the latter first.

According to these critics this theory makes the radically untenable assumption that perception may or may not be veridical, or, in plain English, that it may or may not be true. But nothing except judgment can be either true or false; and perception, therefore, cannot be either.

This objection is only a dogma. There is a risk of error in every species of apprehending, and not merely in judgment. That which confronts the mind may or may not be as it seems. An illusory percept, to be sure, claims to be as it seems, and it is verily a determinate appearance; but that is not to the

point since precisely the same thing occurs in a false judgment. Anyone who judges that Caesar died in his bed has a thinkable complex before his mind which is something, appears to be true, and is false in fact. If it is a misuse of language to say that perception may be false, let us say that it may be mistaken. The name does not matter.

It might be otherwise if judgments based on perception referred to the percepts on which they are based, but that is certainly not the case; and it is essential to notice that it is not. Psychologists, it is true, make judgments about their percepts, but that is quite a special case. When I judge "That is a goblet" my judgment is based on my percept, but it does not refer to this percept. It refers to the goblet; and precisely and numerically the same thing is signified both in the perception and in the judgment. The percept is a sign-fact having certain sensible qualities and a meaning which may be expressed in terms of continuance or other properties not directly perceptible at any one moment. The goblet is the continuant itself. This continuant has the features discerned by any act of perception, and it also has the qualities signified in the perceived sign-fact. And the continuant itself is judged as well as perceived.

This alternative theory, therefore (if anything so commonplace can be called a theory), is not impossible, but it may well seem unsatisfactory. When we once admit that error may creep into perception, we find the spectre of ineradicable error in all perception looming before us. For example, there seems to be a personal equation in most perceiving. Everyone who hears a clock ticking hears a rhythmical tick-tack, but there is no physical difference of emphasis in the beats themselves. Very likely there is an impersonal equation too; for what men see or hear is not what dogs hear or see, and yet the world does not depend on the men or on the dogs. If, then, there is no absolute guarantee for the truth of any perception, and if any perceived thing can be perceived more and more adequately in proportion as we attend to it more carefully, what reason have we for serious confidence in perception? The best attention we can give must always be inferior to that which a

being with better equipment than ours could bestow. And who can measure the degree of our infirmity?

The point at issue is not the barren topic of scepticism. Sceptics deny logic; and if logic goes, all is gone, including scepticism itself; for the sceptic is a would-be Samson who must himself perish in the ruins he has made. Distrust of the senses however (or rather of the tidings they are taken to convey) need not carry distrust of logic along with it, although it is bound to perplex our beliefs in the whole realm of existence; for the senses are our only evidence for the existence of a physical world. So much must be admitted. On the other hand, the *onus probandi* certainly rests with the doubter of sensory testimony. Credulity is more ancient than doubt, and although credulity is the philosopher's bane, disbelief or suspension of judgment is a logical attitude when, and only when, there are positive reasons for denying that something is as it appears to be. We have seen that there are such reasons; but we have to grant in the first place that something is perceived, and in the second place that the best of all reasons why anything should appear so and so is that it really is so and so. The reasons for doubting depend, not on the imbecility of apprehension but upon the character of the perceived facts themselves. It is surely rash to conclude that there are no colours in a sunset, even granting that the angels might see the sunset differently from us, and that sheep and oxen almost certainly do. Some have thought, even, that the angels can see no colours because of the perfection of their vision, and that God perceives nothing by sense. It is sad that men should have thought so. A Providence who cares for the sparrow may delight in the lark's song, and if the spheres ring with sweet music the angels may surely be privileged to hear. There is nothing derogatory in the perception of physical realities.

To come down to earth, we have a very good right to believe that colour, sound and figure are the very stuff of a continuing world, apprehended in part, and not inadequately, by men and other sentient creatures. Those philosophers who treat this belief as a sort of useful fairy tale told by the Absolute to

that immature part of itself which is incapable of deeper apprehension have first to prove that this physical world is incapable of existence. They cannot prove their contention by showing that the physical world is really a mental thing, for this mentalism remains unproved. They cannot prove it by denying that anything can be apprehended truly unless everything is apprehended truly, for that argument makes an end of logic and of their own theories too. They cannot prove it *a priori* by contending that facts must be sublimated by reason; for reason is capable of dealing faithfully with what is given. To say that sense experience is partial and provisional is true enough, but need not lead to wholesale distrust in the testimony of the senses. According to some writers, all that can be said of careful discriminating perception is that it is the best we can do and perhaps good enough for us. It is another and a very different thing to say that perception is good enough for any knower because it may reveal, and commonly does reveal, physical things as they really are. And that, with some presumption and with tedious emphasis and explanations, has been the thesis of this chapter.

CHAPTER III

THINGS REMEMBERED AND THINGS EXPECTED

> The mind is not where the body is, when it perceives what is distant from the body, either in time or place, because nothing can act but when and where it is. Now the mind acts when it perceives. The mind, therefore, of every animal who has memory or imagination, acts, and by consequence, exists, when and where the body is not; for it perceives objects distant from the body, both in time and place.
>
> LORD MONBODDO, *Antient Metaphysics.*

THE things we perceive are taken to exist at the time when we perceive them, or, to be still more accurate, at the time when we feel the bodily accompaniments of perception. We think we see the shot fired at the time when we see the sportsman pressing the trigger, but, in point of fact, our vision occurs a fraction of a second after this event, because light takes time to travel, because the rate of transmission through the optic nerve is only some thirty miles an hour, and because there may be still further delay in the cortex and cerebral hemispheres. We all know that the report of the shot reaches us rather late, and that Orion, as we see it, is centuries old. Common sense, however, finds no difficulty in accepting these facts. The plain man is reassured when he is told that the interval of time is insignificant for objects near at hand, and he is willing to correct his hasty assumptions in the light of the information which science gives him.

On reflection, however, many philosophers have become convinced that what we call perception contains memory and expectation as well. This fact, if fact it be, is usually said to be an implication of the 'specious present[1]'; and, since some of the arguments on this topic are very confused, it is necessary to dwell upon it for a little. According to these arguments,

[1] James borrows the name from Mr E. R. Clay whom he quotes (*Principles of Psychology*, vol. I. p. 609).

the present moment is only a mathematical instant having position in time but no duration. Any act of attention, on the other hand, is an enduring process, and any event or slab of existence which is apprehended also endures. Hence, we are told, the apparent, or specious, present is always past and future as well as present.

The whole question, to be sure, is very complicated, so complicated, indeed, that there is an excuse, at least, for those who maintain that no pertinacity in thinking can straighten it out. In the first place, present events must be distinguished from earlier and from later ones, and yet any one of these earlier events was formerly in the present, and any one of the later events will be present when the time comes. That is perplexing enough, but our perplexities are doubled when we notice that there is always a twofold series in the case. The process of apprehending takes time, and the event apprehended endures. If I look at a moving train, the train is passing and so is my mind, and neither the passing of the train nor the transition in my mind is a durationless, or mathematical, instant. Moreover, although we commonly attend to something other than ourselves and not to our own attending, still we usually call an event present when we take it to exist simultaneously with our apprehension of it. It is small wonder, then, that there are perplexities.

At the same time the usual accounts of the specious present are needlessly self-contradictory. They aver, in effect, that what appears to be present also appears to be past and future, and go on to speak as if the specious present were both earlier and later than itself. That is nonsense without excuse. The fact of the matter is that whenever we perceive anything we always perceive an enduring slab of time or a stretch of change. A stretch of change, we know, has an irreversible order of earlier and later in it, and we can infer that the same order holds for a slab of time that endures without perceptibly changing. The rest is an affair of definition. If the present existence of the things we perceive is defined to be the existence of these things which is contemporaneous with any present act of attention, then the present, in this sense, endures because the act of

attention takes time, and it should not be impossible to find out experimentally how long it endures. If, on the other hand, the present is defined to be only a mathematical instant, then the truth is that events are never perceived in or at a mathematical instant. What is perceived is a stretch of duration, and any stretch of duration contains an infinite number of mathematical instants in the common order of time.

From this standpoint, the facts are complicated but not contradictory. The supposed contradictions arise from first assuming that perception tries to skewer the perceived event on to a durationless instant, and then discovers that the event, trapped and insulted, cries out that it endures all the same. That is a complete mistake. We do not stop a changing event by observing it. On the contrary, we observe it changing, and neither let nor hinder the change.

When we observe a stretch of transience (as we constantly do) the stretch, just because it is passing, has certain characteristic features which belong to the essence of what we mean by past, present and future. The stretch, being transient, contains the order of earlier and later, but it contains more than that. If it did not, past, present and future would lose their meaning, for the order of earlier and later holds of past events themselves without reference to the present. Quatre-bras, for instance, came before Waterloo. This additional element is felt by all of us. Just because the perceived event is transient it is felt to be slipping away from something and to be approaching something; and these peculiar feelings of 'something slipping away' and of 'something in the offing' are pastness, presentness and futurity *κατ' ἐξοχήν*. They are found in every piece of apprehending, and they are the principal source of the importance we attach to the order of earlier and later. The instants of time have many orders, but we select this irreversible order because of its distinctive connection with these universal feelings.

When perception is defined to be the apprehension of any physical thing which appears to be simultaneous with the act of perceiving (and that is the usual definition), the thing perceived must be supposed to exist precisely at the time occupied

by the apprehension of it, no earlier and no later. This definition is reasonable enough, and perhaps necessary, but it would probably be misleading without some further explanations.

In the first place there is a complication due to the manner of perceptual attention itself. While it is legitimate to speak of an act of attention being succeeded by another act, it would be false to suppose that these acts succeed one another discontinuously. Attention moves with a wormlike motion. It has a forward impetus in every coil and it is never at rest. It is not in two times at the same time any more than a worm is in two places at the same time, but each successive pulse of attention has itself a waxing part and a waning part, and this adds immensely to the complexity of the problem.

In the second place there is the fact of meaning. As we have seen already, what we perceive is a sign-fact. It is a fact itself and part of the factual order of existence, but it is also a fact which in its very texture is significant of a wider range of existence. This wider range, to be sure, is probably of the same stuff as the data of sense, but that is a problem for reflective interpretation, not something given directly in perception. Now these 'slipping away' and 'something in the offing' indications in a perceived fact are, in the first place, enisled in the very being of that fact, and, in the second place, are signs of facts which are definitely earlier and definitely later than what is perceived. The earlier events and the later ones are not themselves perceived, but they are signified by the fact perceived. That is part of what is meant by 'primary memory,' or the indications of the past in the present. By the same logic 'primary expectation' should also be included.

In the third place it must be remembered that every event attentively discriminated has a marginal setting. Most accounts of the specious present, it is true, lay great and perhaps undue emphasis upon this circumstance. A thunderstorm, for example, is a complex piece of atmospheric artillery in which the thunder booms, lightning flashes, and great drops fall. At the moment when I feel the drops, it may happen very easily that the crack of the thunder has just passed its premonitory stage and that the lightning has not quite ceased to stir me. In this case,

therefore, there is overlapping on the margin of attention, and this marginal overlapping may partially conceal the difference in the times at which these interlacing events begin and end. It is a mistake, however, to say as many writers do, that the flash as a whole and the whole reverberation of the thunder are perceived simultaneously with the drops of rain just on account of this partial overlapping. None of these events occurs twice over. The perceived flash and the perceived boom are not telescoped into the perceptible present, and *also* made to stretch out beyond it; and if primary memory and primary expectation really meant (as they are often said to mean) an overlapping of this impossible kind, then primary memory and primary expectation would be only illogical fictions. On the other hand, it is most certainly true that any event perceived has a present setting and fringe, part of which wanes while part waxes. What is more, these marginal waxings and wanings are often irresistible incentives to memory proper and to explicit expectation. Frequently we cannot help asking ourselves what it was that is just passing away, and what it will be that is just beginning; and the answers to these questions are given by articulate memory and by developed expectation.

With these explanations we may now proceed to our problems. It is evident that the things we remember must have an earlier date than our apprehension of them, and that what we expect occurs later. Memory, in other words, looks back to the past, and expectation looks forward to the future. The problem for realists is the precise sense in which these statements are true. Can memory be literal discovery of the past, or expectation literal discovery of the future? Are we directly aware of former things in memory, and of things to come in expectation?

"It is by memory," Reid said, "that we have an immediate knowledge of things past[1]." This statement was more than his officious editor could bear, and Hamilton therefore added a footnote which runs as follows. "An *immediate* knowledge of a *past* thing is a contradiction. For we can only know a thing immediately, if we know it in itself, or as existing; but what is past cannot be known in itself; for it is non-existent[2]."

[1] *Works*, Hamilton's edition, p. 339. [2] *Ibid.*

This statement is brimming with confusion. In the first place, we can immediately apprehend things that do not exist at all. If a man says that 'good differs from bad as heaven from hell' he may intend, indeed, to confine his assertion to existing good things and existing bad things, but he may equally well intend to assert the radical incongruence between goodness and badness themselves, these very universals; and universals do not exist, they only subsist. In the second place it is simply false to maintain that any assertion of existence is confined to the present tense. One might wish that European languages, like some oriental ones, had a tenseless mood, but even a European can see the point. It is true that the past does not exist now, just as it is true that the present did not exist formerly; but existence itself means the whole of existence, not merely present existence; and past events, like present ones, have their determinate place in the determinate series of existence.

So we must refuse to be deluded by the fable that the past *cannot* be directly discovered because it is dead, or that there is any contradiction in holding that direct acquaintance extends beyond the present. On the other hand, it is possible that this restriction holds good in fact, and most philosophers allege that it does. We have only a representative acquaintance with the past and the future, they tell us. Memory is always a present fact representing the past, just as expectation is always a present fact representing the future.

This account of expectation seems to be just. Clairvoyants, it is true, claim to apprehend the future directly, but we need not take their pretensions very seriously until they give us better evidence and less fraud along with it. It is impossible, no doubt, to prove that clairvoyance *must* be a miracle and an absurdity, although the indeterminists say so, very stubbornly. Even in the most chaotic world there could not be more than one set of events at any one time, and this very set might be revealed to the clairvoyants. With or without free will or utter contingency, the past is just the past; and, by the same logic, the future is just the future. In point of fact, however, we expect or anticipate in the present, and the things which

we expect to happen in the future are not really observed intuitively before they happen but are either 'primary expectations' in the sense already explained or else forecasts of what we think the future will be like. Such forecasts of the future are certainly not the future itself; and primary expectation is plainly a present event. It is the promise and prospect contained in the present.

The main problem before us is whether the analysis of memory is fundamentally similar. Is memory an affair of the present signs of pastness and of inference from these, or is it, perhaps, direct apprehension of past events themselves?

The usual account of it seems to be that memory is a species of reproduction of the past in the present. It is the existence of a memory-image which resembles, or at least represents, the past. The past disappears but leaves traces; and these, being revived, are memories.

Undoubtedly, we are capable of reproducing what we have done in the past, and we often call this reproduction memory. When a schoolboy says that he remembers Horace's *Nunc est bibendum* he means that he can repeat the lines at will from 'nunc pede libero' to the end. This repetition is manifestly a reproduction in the present of his former conning of the lines. The lines were 'committed to memory,' and we usually think of memory in this sense when we speak of 'phenomenal memories' like Dr Leyden's ability to reproduce Acts of Parliament *verbatim* after a single reading, or the magic which enables half a score of Moslems to repeat the whole Koran, or Scott's marvellous knack of repeating pages of Spenser or Ossian or Border ballads. Memory of this sort belongs to the same tribe as habit and instinct. It is a kind of 'perseveration,' re-doing what we or our ancestors have done before. The boy who keeps a straight bat because he has been taught to do so, and Fabre's little beetle trundling a ball of provender which he has patted into a perfect sphere, are reproducing what they or their fathers have learnt. And that is what happens in memory of this kind.

On the other hand memory often means recollection, and that is much more important. It is very doubtful, indeed,

whether memory without recollection is memory at all, for mere repetition or mere reproduction does not involve any reference to the past. A revolving piston repeats itself but does not remember, and we often feel that it is an abuse of language to say that the beetle remembers how to pat his ball. If the beetle merely repeats the performances of his ancestors, he does not, strictly speaking, remember these performances even if he is a reincarnated beetle, and we should commonly hold that no repetition is memory unless it is accompanied by recollection in some slight degree. There must be a feeling of familiarity at least, and that feeling must have been acquired in individual experience. Recollection, then, is more fundamental for the theory of memory than repetition, and we may confine ourselves to it.

Recollection appears to be the direct apprehension of the past, and an illustration will show its difference from memory in the sense of reproduction. When Jones asks himself what he recollects of his childhood he does not mean to ask what he learnt in his childhood. He learned to walk and to speak, he learned table manners and toilet conventions, but the odds are that he has forgotten how and when he acquired these accomplishments. On the other hand, he can *recollect* specific events. He recollects the arrival of a baby brother, let us say, or some juvenile delinquencies which brought an impressive retribution, together with a few trivial incidents which seem to have clung to him for no reason that he can assign. These events are not habits or repetitions. On the contrary, recollection seems to be the mind's power of returning, again and again, to precisely the same event in the past. These peaks in the past stand out in relief where everything else is a blank or a crapulous haze, and Jones's repeated attention to the same thing is quite different from any habit he may have learnt. Reproduction is a fresh performance similar to a past one. Recollection seems to be direct acquaintance with the past itself.

It might seem, indeed, that this analysis of recollection could be proved to demonstration. The alternative hypothesis is that Jones's recollections are recurrent memory-images which

indicate the past. Now, as we have seen, the mere recurrence of similar events is not memory at all, much less recollection. It would be otherwise if these recurring events were *known* to be similar to past ones, but such knowledge surely implies a comparison between present repetition and the past events themselves. How can Jones *know* that any memory-image represents the past unless he can compare the memory-image with the past itself? And does not the possibility of this comparison prove that Jones is directly acquainted with the past as well as with the present?

This argument, however, falls short of demonstration, as a reference to the kindred facts of expectation shows. Our anticipations represent the future; and yet we can never be directly acquainted with the future. At first sight, indeed, this expectation of the future seems itself to depend on recollection. Our knowledge of the future depends on our knowledge of the past, and our confidence in our expectations depends upon our recollection of our former premonitions together with our recollection that the event confirmed them. These facts, however, do not prove the case. The future is never observed, and all that we can observe in the past is a certain consecution from earlier to later. Now the order of earlier and later does not need recollection, for it is directly observed in the specious present. Transience is directly perceived, and transience proceeds from earlier to later. This perception of earlier and later is a sufficient basis for reference forwards or reference backwards, and so the argument falls. For it asserted that this temporal reference before and after was impossible without direct recollection of the past.

On the other hand, even if there is no demonstration, there is at least a very strong probability that recollection is direct acquaintance with the past. That seems, indeed, to be the reason why memory and expectation are so palpably different in our experience. Expectation is only the present sign of a hidden future, and so it is plausible conjecture at the best. Recollection, on the other hand, is often supposed to be certain, precisely because we believe that the past itself is accessible to our observation when we recollect. Even those who hold that

memory is always a reconstruction of the past must admit that it is a very different sort of reconstruction from expectation, and they would be very hard pressed to explain this most manifest difference. The simplest hypothesis is probably the best, and we should accept the facts as they seem to be, unless something in the character of apprehension shows that our acquaintance with the past must be indirect.

As we have seen, there is no obstacle of this kind, but so many philosophers find one gratuitously that it is necessary to pursue the point a little further. If we go the way of the mystics and suppose that we have to become a thing in order to know it, then, of course, we cannot know the past; but, in that case, our own perverse assumptions have worked our undoing. Mysticism as a way of being should command our respect, if not our aspirations, but when the mystic, becoming arrogant, waves his wand before the multitude and whispers darkly that knowledge is not what it is, it is time to be on our guard against this wizardry. If, again, with a perverted matter-of-factness, we declare that apprehension is an immediate contact of present mind with present thing, and infer that no mind can encounter the past, we have dug the same pit for ourselves with a spade instead of a spell. Change the language and the fallacy remains. Knowledge is not communion with the thing nor contact with it. It is just knowledge; and we may inspect the past as well as the present.

To those who are not hampered by these prepossessions the problem is simply one of analysis, but the facts are intricate enough to make the analysis very difficult. Psychologists seem to be agreed that the first requisite of memory is the revival of an image which represents some past event. A bad psychologist stops there. A better one remembers that this resuscitated copy is, after all, 'snug in its own skin' (as James puts it[1]), and must be expressly referred to the past if it is memory at all. The main psychological problem, therefore, is the character of this reference of a memory-image to the past, and we are told that the past must be *our* past, and that a clear recollection is one that can be dated in our former personal experience.

[1] *Principles of Psychology*, vol. I. p. 650.

This dating in personal experience, however, does not affect the logic of the question. A dated memory is something that we remember in its context. It is an event remembered in connection with other remembered events. Smith dates his recollection of the Matterhorn by remembering the details of his ascent, and of that memorable visit to Zermatt. He remembers the ascent in connection with Robinson's aspersions on his climbing powers before he went up, and with Jones's envious belittling of his exploit after he had returned to the hotel. If an isolated recollection, therefore, is held to be the existence of a memory-image, a dated recollection can be nothing but the existence of a group of connected memory-images.

This explanation in terms of memory-images is plainly opposed to our earlier argument which maintained that recollection is direct acquaintance with the past. According to the usual theory, Smith's recollections of his ascent of the Matterhorn are a series of representative images in his specious present. These images are what is before his mind when he relates his adventures at his own fireside, and in that case there is no room for direct recollection of the ascent itself. Smith's memory is not split into two. He does not see these images and also the Matterhorn itself, as if he stood on the bridge at Zermatt and compared the mountain with a picture-post-card. There is only one thing before his mind as he tells his modest story, and our problem is what that thing is.

He remembers, I think, the very thing that he perceived. What he saw as he toiled up the slopes of the mountain was a series of sign-facts, each signifying the same continuant, and each belonging to that continuant itself. What he sees with the eye of reminiscence is also a series of sign-facts, only there is rather less of fact in them though quite as much of sign. Smith remembers the same thing as he formerly observed, for in both cases he is aware of the Matterhorn. The perceived Matterhorn, however, differs in many ways from the remembered Matterhorn, because a great deal of the perceived detail of it escapes the mind. This loss is the penalty of obliviscence. Memory is a poor affair compared with perception, and that

is why Smith intends to go back to Zermatt as soon as his funds permit. But although the remembered colour is fainter and more schematic than the colour formerly perceived, it is still the very colour which shone on the Matterhorn when Smith climbed it.

This theory would be nonsense if it implied that Smith remembered his former percepts, for these could not change through obliviscence and also be literally the same. It would be a metaphor, therefore, and a bad one, if we said that Smith's (so-called) memory-images are just his former percepts glimmering faintly through a misty veil of time. But Smith did not perceive a percept. He perceived the mountain, and there is no contradiction in maintaining that he remembers the very mountain which he formerly perceived. His percept was that in the mountain which he formerly perceived at a given point in time. It was the Matterhorn itself cabined within the limitations of Smith's vision. Similarly his so-called memory-image is that in the mountain which Smith is able to remember. Memory has its own restrictions. Smith's memory is limited to the past Matterhorn just as his perception was limited to the Matterhorn at the time he perceived it (except for the signs which indicated continuance). Smith therefore remembers the mountain in the state in which he formerly perceived it. Again, remembered things are not apprehended so fully as things perceived, but, on the other hand, the scope of memory is wider than the scope of perception. The mind's eye can take in more at once than the perceiving eye, and some persons even claim that they can see all the sides of a cube at once in memory. It is needless to pursue these details, however. Our contention is that the things we perceive are also the things we remember, and that memory-images are commonly misnamed. Memory does not mean the existence of present representatives of past things. It is the mind's awareness of past things themselves.

Is there no such thing as reproduction in memory, then, and is the whole theory of memory-images simply mistaken? That would be going too far. Although Smith's memory is not split into two, it is probable that some reconstructions in the

present accompany his recollection and blend with it. When he remembers his ascent of the Matterhorn, he remembers not merely the steep places and the insecure footholds, but also his anxiety and his laboured breathing. For the most part, these memories can be explained by the hypothesis of direct acquaintance with the past without further ado. Still, there may also be some reconstruction in the present. If it comes to that, Smith's body does a little reconstructing for him. His heart may begin to beat appreciably faster and his breath come quicker as he remembers those painful panting moments before his second wind came to him. Indeed, there is always a slight bodily effect of this kind though it seldom makes any appreciable difference to anyone's alveolar percentage of CO_2.

What Smith's body does in these cases, his mind may do also. While he may recollect a past emotion without any present excitement, the chances are that his recollection of an exciting event will excite him again, and it is common enough for excitement of this kind to be attributed mistakenly to the past. It is easy to feel a hero when the danger is over and not very difficult to be duped into the recollection of having felt like a hero. Again, although memory has not quite the same limitations as perception (and therefore should not be discounted merely because we remember more at a given moment than we ever perceived all at once), still there are limits to its powers in this respect. Smith during his genial reminiscences, throws himself back, as it were, into this ascent of the Matterhorn, and very likely *sees* himself toiling up it, much as he might see himself in a dream. It is impossible to suppose that he ever saw the sweat pouring from his brow, but he can see it well enough in memory, or, rather, in what passes for memory. This experience is due to imagery eking out the memory, and although it is generally easy enough to distinguish between memory and this embroidery of fancy, still it is not always easy and sometimes it is not even possible. When George IV remembered how he had fought at Waterloo, his memory was all embroidery. To be sure he had been embroidering so long that, in a sense, he really did remember; but the date which he remembered was later than 1815.

Illusions of memory are not usually so egregious as this one, but they are notoriously frequent and they seem to be due either to mistaking a present reproduction for recollection of the past, or to associating recollections wrongly and so misdating them. George IV's illusion concerning Waterloo illustrates the first case. The child who thinks he remembers an episode of his childhood when the truth is that others have mentioned it so often in his presence that he comes to appropriate the incident to himself, probably illustrates both cases; for he mistakes his present reproduction for past fact and associates the episode with his early history and not with the later time at which it was told him. The case of misdated recollections is an everyday affair of which examples leap to the mind. Our proneness to this error is connected with the fact that we voluntarily give rein to association when we try to remember. These associations, when we dwell on them, tend to take the form of images, and the cluster of images so arising is mistaken for a determinate event in the past.

Facts of this kind show how untrustworthy memory is. He would be a bold man indeed who trusted his recollection implicitly except for a few striking events, and these, for the most part, very near. On the other hand, there is no sufficient reason for ultimate scepticism in these affairs. The separation of genuine recollections from fictitious ones need not be mere guess-work, and with a little care, the imagery in the present can usually be distinguished from the apprehension of the past. It would be a pleasant world if memory were more reliable than it is; but we cannot change the world, and we must be content with keeping our theories of it as accurate as may be.

Indeed, we should not be too sceptical, even concerning expectation. After all, we are passably prescient about many things, even granting that the medical text-books are bound to warn us that 'prognosis should be guarded.' Fuller consideration of this topic, however, must be deferred until a later chapter.

Before passing to the problems of imagery we may perhaps consider an objection which is frequently urged. 'Your

theories,' the objector says, 'may be well enough, but how do you explain memory? You say nothing about the brain, or channels in the nerves, or psycho-physical dispositions, and until you do that you have explained nothing.'

This objection need not detain us long. It is plainly impossible to explain the fact of memory itself. Memory is possible, and that is all we need to know. All we can do, and all we should want to do, is to explain why we remember one thing at one time and another thing at another time, and explanations of that kind do not seem to be beyond the reach of very moderate resources without any reference to physiology. We remember this or that when something in the present acts as a cue, and when the mind, in apprehending it, is led to think of something in the past connected with the cue. There is nothing strange in the circumstance that these cues should lead us to think of the past; for the past, speaking generally, is always with us. We do not lose hold of it as the hours hurry forward, and we only attend to it more carefully when we follow up our cues. The past, then, is neither trackless nor unknown. The recency, vividness, or singularity of particular events in it make some recollections easier than others, and we have usually a sufficient motive for setting ourselves to remember. Those who believe that history repeats itself ought to believe in the utility of history, and our lives would be robbed of half their interest if we had no curiosity about former things.

The mere fact that the brain is stimulated does not explain perception, and the mere fact that the brain endures and retains traces of former stimulation does not explain memory. We have to trust perception and memory in order to obtain this physiological information, and we have no right to disown these witnesses at a later stage of the argument. The ultimate fact in the case is the fact that apprehension itself occurs, and it is quite unreasonable to be dissatisfied with the analysis and description of apprehension as we find it. We can perceive the present and recollect the past; and we are not required to explain the inexplicable.

CHAPTER IV

THE STUFF OF FANCY

> Whence come ye, so wild and so fleet,
> For sandals of lightning are on your feet,
> And your wings are soft and swift as thought,
> And your eyes are as love which is veilèd not?
>
> SHELLEY, *Prometheus Unbound.*

THE subject of this chapter is imaging, not imagination. This distinction between images (or fancy) and imagination is at least as old as Coleridge's *Biographia Literaria*, and Coleridge's account of it is well worth quoting. Milton, he says, 'had a highly *imaginative*, Cowley a very *fanciful* mind,' and 'the division is no less grounded in nature than that of Otway's

> Lutes, laurels, seas of milk, and ships of amber,

from Shakespeare's

> What! Have his daughters brought him to this pass?'

The imagination, he tells us in another passage, 'dissolves, diffuses, dissipates in order to recreate: or where this process is rendered impossible, yet still at all events it struggles to idealise and unify....Fancy, on the contrary, has no other counters to play with, but fixities and definites. The fancy is indeed no other than a mode of memory emancipated from the order of time and space[2].'

We should accept this distinction, although we need not tie ourselves to the letter of Coleridge's transcendentalism. Imagination (to quote Mr Conrad who ought to know) is 'a creative effort in which mind and will and conscience are engaged to the full, hour after hour, day after day[3].' It is the faculty with which Mr Conrad, when he wrote *Nostromo*, 'wrestled with the Lord for his creation, for the headlands

[1] *Biographia Literaria*, chap. IV.
[2] *Op. cit.* chap. XIII.
[3] *A Personal Record*, chap. V.

of the coast, for the darkness of the Placid Gulf, the light on the snows, the clouds on the sky, and for the breath of life that had to be blown into the shapes of men and women, of Latin and Saxon, of Jew and Gentile[1].' This high imagination, to be sure, often uses imagery. The romance of green mansions or a purple land is clothed in imaged raiment. The light that never was is often the best part of poetry. None the less, imaging in itself is usually a pedestrian affair. Even children, though their fancy is sometimes quaint and nimble, are earth-bound in most of their imaging, granting that a Daisy Ashford arises here and there to wrestle with some bright spirit and a stubby pencil for *The Young Visiters*. Most images, in a word, are mere occurrences. Dream pictures, and the chaos of an *Ideenflucht* are so many facts presented to the mind; and it is part of our business to consider what these facts are.

Images tend to arrogate a quite disproportionate importance in many psychologies and theories of knowledge. Some writers even speak as if the mere existence of symbolic images were the same thing as judging, and others have never overcome the ancient fallacy of confusing universals with attenuated images. Half the talk about 'concepts' is sunk in this confusion, and even those who avoid this pitfall are very apt to neglect thinking in their eagerness to explore the imaged accessories of thinking. Even if there is no such thing as image-less apprehension, images are usually only illustrations of what we think about. A man who thinks of the foreign exchange may always have an image of the 'Lusitania' and its bullion, or of the Bourse at Brussels when he does so, but it is surely manifest that he does not identify the foreign exchange with the Bourse or the ship.

It is doubtful, indeed, whether the elaborate investigations into types of imagery which are so prominent in many psychologies have a tithe of the value which they are commonly supposed to have. It is very interesting, no doubt, to know that some people can visualise their breakfast tables in minute detail, that others can visualise shapes and not colours, that a few cannot visualise at all, that there is no connection

[1] *A Personal Record*, chap. v.

between the power of visualising and keenness of sight, that those who cannot visualise can see in their dreams as well as those who can, that some who have become blind can visualise, that there is *audition colorée*, that women have clearer taste-images than men, and that a few privileged persons can smell the imaged perfume of the rathe primrose that forsaken lies, when they are asked to perform this feat in a stuffy classroom. These interesting facts, however, do not seem to have any great importance beyond themselves. It looks promising, to be sure, to classify pupils into audiles, visiles and motiles according as auditory, visual or motor images predominate in their thinking, for it might seem that the audiles would be taught most easily through illustrations borrowed from sound; and the others similarly. This idea, however, is wholly mistaken. The present writer, for example, cannot visualise at all, but he can understand a description of St Sofia or of the Golden Horn as well as other people. Anyone, indeed, can appreciate illustrations borrowed from sight, sound and the rest, provided that he has the normal equipment of senses. A poet blind from birth, it is true, cannot describe the look of things; but that is quite another story.

Images exist, however, even if they are overrated, and the elaborate investigations of Galton, Ribot and the others should tell us at least what they are. But we know that well enough. Images are the mimics of percepts. A visual image has shape and colour; Bach could hear his Fugues in his mind's ear; and so on. Compared with things perceived, it is true, images are usually fleeting, ghostly and unstable, but that, after all, is a relative matter; for some percepts are fainter than some images, and some imagery steadier than some perception. Indeed, imaged things and perceived things are so manifestly similar that it is difficult to explain why we mistake the one for the other so seldom. The chief reason seems to be bodily. When we perceive anything we are aware of our bodies as well, and the bodily adjustments of imaging are different from those of perceiving. We close our eyes to see images and open them to perceive things; and this difference in bodily consentience enables us to distinguish the two.

This intrinsic similarity between imaging and perception makes the status of images a very difficult problem. Common sense, it is true, has its simple solution pat and ready, but this solution, by an unhappy chance, is quite untenable. According to common sense, images are unreal and merely mental things. They are the stuff that dreams are made on, that is to say, nothing but the dreamer's private mind-stuff. Berkeley's critics, for example, supposing most absurdly that it was impossible to distinguish between dream and waking on the good bishop's principles, proceeded to waste much ink in trying to show that a world composed of images would be only a mental fiction. So Beattie told Hume that the idea (or image) of a roaring lion is not a roaring idea, and that the image of an ass is not a long-eared sluggish idea[1]; and he put certain 'clownish questions' to Berkeley in the same spirit. "Where," he asked, "is the harm of my believing that if I were to fall down yonder precipice and break my neck, I should be no more a man of this world? My neck, sir, may be an idea to you, but to me it is a reality and an important one too. Where is the harm of my believing that if, in this severe weather, I were to neglect to throw (what you call) the idea of a coat over the ideas of my shoulders, the idea of cold would produce the idea of such pain and disorder as might possibly terminate in my real death?[2]"

These heavy witticisms, of course, did not touch Berkeley's case. He could, and did, distinguish between an 'idea of sense' and a mere image, and his theory implied no confusion between a square meal and a Barmecide feast, even granting that the language of it compelled him to admit that we are fed and clothed with ideas. What he did maintain was that percepts (or ideas of sense) have the same status in relation to the mind as images have. And he held that both were mental. His critics replied, in effect, that images are mental, and perceived things independent of mind.

This path, however, was not open to them. These mimics of sense which we call images must have the same status as percepts. If the latter are objects the former are too. If one

[1] *Essay on Truth* (vol. I. 1776), p. 217. [2] *Op. cit.* p. 244.

is a mental event so is the other. The imaged St Sofia is domed and minaretted and shapely just as the perceived St Sofia is, so that if the perceived St Sofia cannot be mental (on the ground, say, that the mind itself cannot be coloured or extended) the imaged St Sofia cannot be mental either (for precisely the same reason). *Per contra*, if the perceived St Sofia is not mental the imaged St Sofia cannot be mental either; and even common sense must accept the logic of this situation if it hopes for consistency. It is not at liberty to make a handsome present of images to the idealists, like the parson who did not grudge his sermons to the burglars:

> They came and prigged my silver, my linen, and my store;
> But they couldn't prig my sermons; they had all been prigged before.

We have argued in the two preceding chapters that things perceived and remembered are independent of the mind and directly apprehended by it. Our grounds for this conclusion were, briefly, that they seem to be so, that the best possible reason for their seeming so is that they really are so, and that the arguments which purport to prove that they are not so are inconclusive. And now we have discovered that images have the same status, in this respect, as perceived or remembered things. They are apprehended things confronting the mind, and not varieties of mental operations. They are given to the mind, like anything else that it discovers. Coleridge said that when he dreamed of Kubla Khan's palace 'all the images rose up before him as things.' It may well have been so, for that is what the images of our dreams commonly do. They stand before us like the Brocken spectre or the *Fata Morgana*, like Tasso's familiar spirit or the angel that touched Elijah in the wilderness. Images, in a word, always appear as 'things' unless perceived things conflict with them, and sometimes even then. When they conflict with perceived things they are accounted shadows and so contrasted with the substance of perception. Yet shadows, after all, are things in their own way, and Coleridge admitted as much when he went on to say that his vision passed away after his interview with that meddlesome 'person on business from Porlock,' 'like the

images on the surface of a stream into which a stone has been cast[1].'

If realists, however, are bound to hold that images have the same status as perceived things in many ways, they are not bound to identify the two. On the contrary realists are bound to contrast them, despite the fact that they have colour and shape and sound in common.

The contrast between dreams and waking life is usually unfair to the dream. The dreamer is not usually in a position to test his dream-world, and if he experiments with Reid's remedy for curing nightmare and tries to throw his dream-body over the dream-precipice, the dream promptly vanishes. The memory of a dream, on the other hand, is such a very feeble affair that it is seldom a serious competitor with waking life, and yet the dream may have been very lusty indeed when it had no competitors. As Hobbes remarked long ago, 'the light of the Sun obscureth the light of the Starres[2].' The only fair comparison would seem to be between the memory of a dream and the memory of something perceived, and, even then, the luck is against the dream, for the memories of waking life are so closely knit with one another and with the perceptions of the moment that they acquire a kind of solidity which the dream lacks. If we leave dreams out of account, however, and try to compare present imagery with present perception, the images again are unfairly placed. We are practical men (we boast of it) and we cultivate our images as little as may be. Why, then, should we be surprised if these neglected things should appear to be only pale, starved, shivering, gibbering ghosts when they receive their tardy summons?

It is clear, to be sure, that images do not fit into the continuous context of waking life. Anyone who dines out on the strength of a dream invitation may be welcome but was not expected. Our beds are not stained by the wounds of dream scimitars. And so on. The explanation of all this, however, is not so easy. If we have a right to maintain that Buckingham Palace is in space and time because we perceive it to be

[1] 'Of the Fragment of Kubla Khan.' Note preceding the poem (1816).

[2] *Leviathan*, bk I. chap. II., 'Of Imagination.'

extended and enduring we seem to have the same evidence about dream-palaces. We certainly apprehend these nocturnal intruders, and we find it very difficult to discover a place for them.

It has been suggested that dream-palaces inhabit our bodies since they are only disturbances of the nervous system; or again, that they occupy their own spaces and times although they are excluded from the privileged order of space and time which science and common sense select; or again, that they belong to the physical world but that the apprehended meaning of them is false.

The first suggestion may be dismissed. The nervous system, it is true, plays its part in dreams and imaging; and the stomach does so too. Dryden, we are told, used to eat raw meat in the hope of obtaining splendid images. Mrs Radcliffe used to prepare for fantastic dreams by preparing fantastically indigestible suppers, and many anchorites have tried to summon visions by fasting and scourging and other calculated austerities. But the images which we perceive do not inhabit either the stomach or the nervous system, and they do not nestle within the dark coil of our nerves. They require the nervous system in the same way as perception does, and not in a totally different fashion.

The second suggestion looks more promising, but seems to involve the absurd consequence that there really are dream spaces in the same sense as there really are perceived spaces. Hashish, on this assumption, would be a means of enabling us to behold a different time order from the usual one, and flagellants would scourge themselves into meeting real angels in a real celestial world. On the other hand this suggestion is not absurd unless it is misunderstood. The celestial worlds of this hypothesis would be different celestial worlds for every anchorite. One dream does not fit into another dream any more than it fits into waking life, and dreamers, in the general case, visit a whole series of dream worlds in a single night. *Per contra*, although there is no contradiction in this infinity of discoverable worlds there are some grounds for suspecting that worlds of that kind are as good as no worlds at all.

Still, as we have seen in an earlier chapter, we never perceive the physical world as a whole, and, as we have also seen, the

things which Smith or Jones perceive directly, with all their variations and their perplexing differences at different times, may not fit into a single physical world quite so tidily as we naïvely suppose. Images, according to the most usual theory of those who accept their objectivity, are quite as objective as perceived things. They are only selections from a manifold of objective being, and they are discovered precisely as they are in themselves. The physical world, according to this view, is *the* selection from this manifold of being which is peculiarly useful for everyday life. Unless we are psycho-analysts it does not pay us to take account of dreams, and the apparent unreality of dreams is neither more nor less than the uselessness of our drowsy selection. It stands to reason that images are somehow real, simply because they are plainly apprehensible things. According to this theory, they are real in every sense in which the objects of perception are real, except that they do not take part in the work of the physical world.

If the physical world were really a collection of percepts and unperceived sensibles (as the sensory atomists hold) this theory would be tenable. It requires to be modified, however, if, as we have maintained, we perceive physical things and not percepts, and the kind of modification which is required should be tolerably evident to the reader. Images plainly are coloured, extended, and so forth, just as percepts are. Why should we not suppose that they are physical facts forming part of the world of physical things, but that the meaning of imaged things is different from the meaning of perceived ones? If that were so, errors would be bound to arise (as they do in cases of illusion or hallucination) if the meaning of imagery were confused with the meaning of perception. And that is our third suggestion.

Images are relatively detached in comparison with the objects of perception, and this detachment appears in three principal ways. In the first place images are not usually suffused with a cluster of meanings derived from several senses. A visual image is almost wholly visual. It shows very few traces of tactile or other values. In the second place, imaging has a different bodily margin from perceiving, and the bodily fringe

of all perception helps us very much in localising the things we perceive, and in grasping their steadiness and solidity. Visual images, for example, are not usually localised relatively to our bodies, for although they float before us vaguely they do not usually appear to be at any determinate distance from us; and when they do (as in the cases in which we see double by pressing our eyeballs) they are localised relatively to perceived things. Again, and this is the third point, images are seldom localised relatively to other images, because images in the vast majority of instances reveal themselves as detached beings each fenced in its own pen.

Illusions and hallucinations occur when imaged things and their meaning are interpreted as if they had a perceived meaning. When Blake asked the lady, "Madam, did you ever see a fairy funeral?" and went on to say that he himself had often seen one on a dewdrop, he purposely made this very confusion; for these elfin obsequies did not take place on the surface of the dewdrop. The man who slew the phantom with his hatchet really saw a phantom form; but he made a fearful error when he mistook the phantom for a perceived thing[1]. The drunkard's loathsome rats and crawling serpents do not deceive him up to a point. As I have heard it put, they are very good serpents as far as they go; but they do not strangle him as perceived snakes might.

These errors would not be likely to occur either if images had no meaning or if their meaning had nothing whatsoever in common with perceived meanings. Although they are relatively detached, imaged things are apprehended with an imaged meaning which indicates a wider sphere of being. On the other hand, the definite detailed meaning of imaged things is found to be different from the meaning of perceived things when it is carefully examined. We do not usually confuse the two systems of meaning in waking life, and we can usually discriminate passing well between them in daydreams and in *illusions hypnagogiques*. There is no occasion to discriminate in dreaming proper, because the sense of perceived things is quite shut out.

[1] Trial of Bernard Schidmaizig in Silesia. Quoted by MacNish, *The Philosophy of Sleep*, pp. 75–77, from Hoffbauer's *Treatise on Legal Medicine*.

If we were to draw a bow at a venture, we might hazard the guess that images are really physical facts, partly identical with perceived or remembered things, and differing from these latter precisely in the respects in which their image-meaning claims to be different. I wish to defend this thesis, though I hope I am sensible of its difficulties. I am confident, at least, that the elements of imagery should be explained in this way. The imaged order of these elements is certainly harder to account for, but even this difficulty may not prove insuperable.

It is a commonplace that imagery is borrowed from perception. Those who are born blind see no white vistas when they think of the frozen Caucasus. Those who are born deaf cannot hear the nightingale in their imagings. It is precarious reasoning, no doubt, to infer from this circumstance that every note of elfhorns in our dreams has actually been heard at some time or other, or that every tint that the fancy can summon has once been seen with our eyes. Hume raised the doubt very pertinently when he asked whether a mind that had perceived all the shades of blue, save one, could not supply the missing tint from its own resources[1]. On the other hand, Hume's experiment could never be put to the proof, for no one knows how many shades of blue he has perceived during his lifetime, and most of the possible shades of blue could be discerned during any summer afternoon by the sea. What is more, the very modesty of Hume's doubt is excellent evidence of the solidity of the usual theory. We may agree, then, that the elements of any image were once perceived; and in that case there is nothing to hinder us from supposing that the elements imaged at any time are literally the same elements as those formerly perceived. These imaged elements, to be sure, have lost some of their former fulness of detail, but this partial loss does not annul the identity of what remains.

Proceeding with our hypothesis, then, we find, in the next place, that it agrees very well with our earlier account of memory. We found, in the previous chapter, that although some reproduction in the present may blend with our recollections, still the objects of recollection are not really memory-

[1] *Treatise*, bk I. pt I. sect. i.

images existing in the present but the very scenes and events in the past which were formerly perceived. It is doubtful, indeed, whether anyone would dispute this account of the matter unless he supposed that it implied insuperable difficulties with regard to space and time. When Smith, to return to our illustration, recounts his ascent of the Matterhorn, his memory, we are told, is certainly a present phenomenon, and the ice and the snow which he sees in recollection cannot really be part of the Matterhorn, since Smith is in England and the Matterhorn is in Switzerland. If the elements of all imagery, however, are really identical with something formerly perceived, and if the temporal and spatial meaning of imaged things should never be identified with the spatial and temporal meanings of present perception, it is possible to maintain that the 'memory-images' which Smith is said to recollect during his narrative are 'images' whose date is in the past and whose place is in Switzerland, while images which are not memory-images are fragments of the same order but emancipated from the perceived or remembered world of space and time. And that, in a word, is our theory.

These difficulties concerning the place and the time of recollected things are dispelled by closer examination. Smith recollects them now, but he need not suppose that they exist now. Again, he is in his room when he recollects them, but he need not suppose them to be in his room, and he would not suppose them to be there (unless he were hopelessly confused), even if they were mere images, fully emancipated. Smith, to be sure, might refuse to accept the suggestion that these recollected scenes are really in Switzerland and in the past, because he would suppose that the apprehension of anything in its place and in its time requires the whole system of meanings involved in *perceiving* a thing in its place; and it is the room and not Switzerland which has these perceived meanings for him at the time of his recollecting. If he could be induced to discard the distinctive meanings of perception, however, he would have no good reason for denying that the place of his remembered ascent of the Matterhorn is really Switzerland, and the time of it the past.

As we have seen, an explicit recollection is dated, that is to say, it is recollected in a context of other recollected events. As soon as we direct our minds to any landmark in the past we begin to recollect the surroundings of the landmark, and this process calls for no special comment so long as it goes on spontaneously and readily. There is a great deal to be learned from it, however, when it is baulked and forced to hesitate.

The process of gripping an elusive or uncertain recollection calls for a sort of tentative palpation in the dim borderland of memory. We have a hazy idea of what the facts were, and then we ask ourselves whether they were thus and thus. According to the usual theories, these tentative palpations are so many *ballons d'essai* in the way of present reconstruction which we try to include in the representative fabric which we are weaving at the moment. A much simpler hypothesis is open to us. Let us suppose that these *ballons d'essai* are really dateless and placeless recollections which appear to float before us just because we cannot apprehend their determinate position at some former place and time. In point of fact, recollections *must* float so long as they are dateless and placeless, and the date or place of anything can scarcely be an intrinsic property of it since it is always a relative matter which the context decides. Even percepts appear to float in this way during vertigo or in a summer haze, simply because their relation to our usual *points de repère* is suddenly altered. These tentative palpations towards explicit recollection, therefore, need not be present candidates for an obsolete constituency. They may very well be old things whose specific context in the past is not remembered at the time of this tentative palpation, and then we search for the context. "I remember a round tower such as you describe. Where was it again? Oh, yes! It was a signal tower in Donegal. I saw it from a boat, I remember. Yes, the headland ran so and so and the tower was—No, that was a Martello tower, Napoleonic, I think, or perhaps Elizabethan. I am vague about these things, and the boatman told me one or the other. Let me think. Oh, yes! I mean the Tower at Glendalough, among the Seven Churches. It is at

the head of one of the loveliest valleys in Wicklow..." That is the kind of process that occurs.

The context of a recollected event is usually said to be revived through association, and this description of the facts may be accepted without challenge, since association, in modern psychology at all events, is interpreted very loosely. Jung, for example, classifies associations into numerous groups, some of them logical like 'simple predicates' or 'relations of the verb to the subject,' some linguistic like 'clang associations' and 'completion of words,' some factual like 'co-existence,' some classificatory like 'co-ordination' and 'sub- or supra-ordination,' and so on[1]. The truth seems to be that any conjunction once apprehended may be subsequently associated, and the examples range from mere togetherness in time to logical implications. Association is just the conservatism of the mind apprehending things in their old setting, so that anything that recurs in our experience tends to be apprehended along with its former accompaniments. It is not difficult to find examples, but perhaps I may be allowed to quote a passage from an entertaining writer by way of illustration:

> Nor a clergyman. I would not encourage that—not because I do not admire and esteem the clergy, but I don't like the idea of a young man leaving the sea for the Church. Not the right preparation, I'm sure. Sailors, my dear. So profane. Parrots you know; one hears such dreadful things. The Church should be a call, I think, not a deliberate choice like that. And then again the expense of the preliminaries; the examinations, so trying; Hebrew, I believe: Greek: the waiting for a curacy. And then the curacy itself. Vicars' wives, I am told, can be so vexatious. I remember poor Mrs Rackshaw very vividly. Such a temper, my dear. But, of course, if he was successful it would be very nice for you, although bishops' wives have no title, nothing. Very unfair, I think—the Lord Bishop and plain Mrs. Not just[2].

If the good lady thus reported had developed her associations into full recollections she might have been excellent company. There is hope in the parrot and the Lord Bishop and poor Mrs Rackshaw. If, again, she had resolutely controlled her

[1] *Studies in Word Association*, chap. II.

[2] E. V. Lucas, *Mr Ingleside*, pp. 275–276.

associations in the interest of her subject, her advice might have been almost as valuable as she thought it was. Association, for the most part, falls between these two stools, and so is vaguely reminiscent without recollection, vaguely pertinent without logic, vaguely old without the beauties of antiquity, and vaguely new with all the insipidity of staleness.

Association, indeed, is a species of imperfect recollection. It is half-recollection. To apprehend a connection is, in principle, to retain it, and this fact explains the status and the character of all associations. The 'association of ideas' was fondly cherished by a former generation of psychologists because it was interpreted primarily as the association of images, and these, in their turn, were half-recollections of some connection formerly *perceived.* The fact that association is half-recollection distinguishes mere associates from recollections proper; for mere associates lose something in comparison with memories. Their edges, to speak metaphorically, are rubbed off when their context is forgotten. They are even more corroded and decayed than memories, and this corrosion makes them, to all appearance, intrinsically dateless and placeless. These associated images have lost too much detail to have any assignable position, and so they have to float. Sometimes, it is true, they float only temporarily because of a momentary lapse of memory. Psycho-analytic literature, for example, is crowded with unidentified images which finally receive their place in some definite recollection. But, for the most part, associated images are not of this order. They result from repeated perceptions of the same kind of thing. If Nimrod has seen an ibex's head but once, he may always be able to remember a place for it, but if he has seen a moose's head scores of times, the odds are that he retains only the common residuum from those perceptions, and not a specific, individual recollection.

Because some images are so corroded that they are, so to speak, one thing as much as another, some authors have concluded that images are inherently general in their nature, and hence have inferred either that the existence of images *is* general knowledge, or that they are fundamental in all general

knowledge. It is not so in fact. A perceived thing can symbolise a general idea quite as well as an image can. Peaches may symbolise opulence as well as the apples of the Hesperides, and the poppies in Flanders are as suggestive of death as Charon and his fabled ferry. Images, to be sure, are often chosen as illustrative symbols. For this purpose we often prefer half-recollections to full recollections because it is too much trouble to recollect properly. A great many people tell us that 'doctors say so and so' to save themselves from considering what doctor ever said anything of the kind.

Images, then, have not in themselves a more general meaning than perceived or remembered things. On the other hand, the meaning of imaged things is emancipated from any particular context in space and time, and so it may simulate logical generality because of its omission of manifestly particular circumstance. Images, however, are thoroughly particular although they are placeless and dateless. An image has extension, figure and duration just like anything perceived or remembered. The only difference is that it is cut loose from the order of perceived and remembered fact. In a word, images are precisely what they appear to be, spatial, temporal and physical, yet without a home in the perceived order of time and space. The fact that 'general' thinking is so frequently accompanied by imagery is only a proof of the hold which the physical world has upon our spirits. We feel that nothing really counts unless it has a place in perceived fact, and when we cannot perceive or remember an illustration we do the next best thing by imaging one.

Summing up, then, we may fairly claim that this account of images has been shown to hold of all the elements of imagery, of associated images, and of illustrative ones. On the other hand, the problem of creative imagery has not yet been touched, and the reader may reasonably suspect that there are peculiar difficulties concerning it. Our theory, he might say, would supply the stones for Kubla Khan's dream palace, but it could not build that stately edifice. Who ever saw a dragon, or a wyvern, or a chimera, and who had ever the slightest difficulty in imaging one? A cruel fate has con-

demned thousands of little waifs to loiter and starve in dingy streets, but sleep may bring them its recompense, and their dreams may unfold the limitless spaces of enraptured lands. What are we to say, then, of these cases?

The most striking examples of constructive imagery (as opposed to constructive imagination which is not our present topic) are probably to be found in dreams. If we can show, then, that the by-ways of dreamland are not radically different from the thoroughfares of waking life, there will be a strong presumption that our theory holds for the whole range of imaging.

The labours of the psycho-analysts have shown this to be exceedingly probable. Psycho-analysts have proved that dreams are not the utterly sporadic anomalies that credulous ignorance or misplaced romanticism have supposed, and they have also shown that there are principles in dreaming and not mere caprice. The detail of these principles, to be sure, is still matter of dispute. Indeed, it will continue to be disputed so long as merely figurative beings like the so-called 'censor' are supposed to work in earnest, so long as the crude psychology of 'outer' and 'inner' (sparingly flavoured *à la* James or *à la* Bergson) is taken to be the basis of extroversion and introversion, and so long as perverted ingenuity is wasted in showing that any straight stick is ithyphallic or any want sexual on the ground that any stirring of the body is remotely connected with sex. It is time to call a halt when the 'Electra-complex' or the 'father-imago' is taken to be the root of the soul, when avarice is solemnly alleged to be a symbolic development from a child's curiosity in his excrement, when Jung takes fifty pages to show that Hiawatha is an incest-phantasy[1], or when Freud tracks every associate back till he can point to an infantile fixation and then triumphantly assumes that every infant has a midwife's knowledge. Still, when all has been said, the psycho-analysts have certainly discovered some strands of the Ariadne thread which is needed for these mazes.

Let us glance at the phenomena and the method of interpreting them before considering the theory.

[1] *Psychology of the Unconscious*, chap. VII.

The phenomena of dreams seem to show a Bacchantic caprice of images made out of nothing, leading nowhither, and containing in themselves neither rhyme nor reason. Everyone, however, by looking a little closer, can find that these bricks are not made without clay even if they are made without straw. There is plenty of experience to show that incubus or nightmare is partially explained by difficulties in breathing and that it is much more pronounced when the sleeper is lying on his back; or that the flapping of a window-blind often synchronises with the dream of a tempest. Again, there is plenty of experience to show that many dreams have a *point de repère* in the dreamer's recollection of the day before. Sleeping dogs follow the chase when the hunt is over, and a sharp word spoken in haste often finds its nemesis in the regrets and disasters of dreamland. It is clear, however, that this type of explanation is very partial indeed. These scanty fragments of yesterday's dream are related to the dream as a whole much as half a dozen pebbles are related to a concrete pillar. Granting that the flapping of the window-blind gives rise to an unquiet sort of dream, it will not usually explain what in detail is dreamt. Even the general atmosphere of the dreamer's yesterday will not explain that. Nightmare, it is true, is rife when the plague is near, and war which oppresses the waking spirit continues to haunt it in dreams; but these facts, it is held, do not explain the distinctive details of the dream, though they may explain why the general trend of the dream is menacing. Accordingly, if the *bizarrerie* of dreamland is subject to law, the interpreter must probe deeper than these surface resemblances.

The method of psycho-analysis is perfectly straightforward in its essence. The analysis tracks the elements out, and the method consists in giving association free play. It is assumed that no detail in the dream is too insignificant to be neglected, and that every element can be tracked by association to its source in former experience. It is also assumed that every disturbance in the normal time of associative response indicates emotional perturbation. This is not the place to consider the technique of psycho-analysis, or to multiply

examples. A single example must suffice, and this one from Jung will serve:

A young patient dreams as follows: *I am standing in a strange garden, and pluck an apple from a tree. I look about cautiously, to make sure no one sees me.*

The associated dream material is a memory of having once, when a boy, plucked a couple of pears surreptitiously from another person's garden.

The feeling of having a bad conscience, which is a prominent feature in the dream, reminds him of a situation he experienced on the previous day. He met a young lady in the street—a casual acquaintance—and exchanged a few words with her. At the moment a gentleman passed whom he knew, whereupon our patient was suddenly seized with a curious feeling of embarrassment, as if he had done something wrong. He associated the apple with the scene in Paradise, together with the fact that he had never really understood why the eating of the forbidden fruit should have been fraught with such dire consequences for our first parents...

Another association was, that sometimes his father had punished him for certain things in a way that seemed to him incomprehensible. The worst punishment had been bestowed after he had secretly watched girls bathing.

This led up to the confession that he had recently begun a love affair with a housemaid, but had not yet carried it through to a conclusion. On the day before the dream he had had a *rendezvous* with her[1].

Stolen fruit and a bad conscience often go together. So do guilt and anything else that deserved or received a whipping. If the boy had dreamed of stealing jam from a cupboard we may be sure that our psycho-analyst would eventually have discovered the affair with the housemaid *via* the interview and the bathing girls. We may trust his *flair* for an Actaeon-complex. Even if psycho-analysts could explain (as they pretend) why the boy did *not* dream directly of the housemaid, they could not explain why he dreamed of the garden and not of the cupboard. That, however, should not be expected of them. It is enough if they can trace the association *après coup*; and that is what Jung claims to have done in this example.

In broad outline, the theory of the psycho-analysts is that a dream is a sort of translation of a 'latent content' into a 'manifest content.' This transformation is the 'dream-work,'

[1] *Analytic Psychology*, pp. 303–304.

and the dramatic portrayal which it adopts usually shows transference and condensation. This transference, however, is not peculiar to dreams since the transference of desires from their original objects to the physician is part of the standard psycho-analytic cure. The condensation or telescoping of imagery, again, is not peculiar to dreams, for it is characteristic of all imagery, as the crowded history of a drowning man's imaging proves. The 'latent content' itself is usually described as a wish or an impulse or a complex of these, and the theory is that the latent content is sometimes dramatised directly and shown in the manifest content. Thus the Archduke Charles of Austria, wishing to waive his claim to the crown in favour of his son, yet doubting his right to do so, had his scruples removed when he saw his father, in a vision, laying his hand on the young child's head[1]. More usually, however, the translation is not straightforward, and in that case it is held that certain 'wishes' are suppressed in waking life either because of social conventions (as in the case of sex) or because (like the instincts of childhood) they are not adapted to the kind of reality which adults encounter. It is supposed, however, that these suppressed wishes find a partial and indirect fulfilment in dreams, where they are bodied forth in a fantasy which has its roots in them, however meaningless it seems.

The further subtleties of this investigation need not concern us here. What does concern us is the general conclusion that dreams are dramatic presentations which can be traced to an emotional or impulsive source. What relation has this conclusion to our general theory of imaging?

The imagery in a dream is, of course, its manifest content, but this manifest content, according to the psycho-analysts, is not really creative. It is one of the termini in a chain of association whose other terminus can be recalled to memory when sufficient pains are taken. The manifest content, in a word, consists of half-recollections, as in any other case of association. This new theory, therefore, supports our general analysis in this important circumstance, and if it were possible

[1] Example quoted by Morton Prince, *The Unconscious*, p. 223.

to explain why there should be any such thing as dramatic portrayal in dreams, and how the manifest content of a dream symbolises or expresses a suppressed wish, or desire, or libido, this support would be very strong indeed.

Dramatic portrayal in dreams is the natural result of the special circumstances of dreaming. During sleep our minds are shut off from perceptual acquaintance with our surroundings, and from the usual responsive movements of our bodies. For that reason the sleeper cannot have any direct acquaintance with sensory fact except in the way of imaging or memory, and the images and memories of dreams, like the stars in Hobbes's metaphor, reveal themselves very clearly just because they have no competitors in perception. In the second place, the dreamer's mind is dissociated; indeed, dreaming is an even more extreme case of dissociation than the hypnotic trance, or the trance-like condition which frequently accompanies extreme physical weariness. Soldiers after a long forced march often wonder whether they are going mad because, when they pull their minds together, they find that they have spent half an hour without having been aware of anything at all except a few waifs and strays of imagery rambling and tumbling and lolloping after one another. Dreaming is the same kind of thing; and we all know that we can ask ourselves in a dream whether we are dreaming or not, and that we may have too little command over our thoughts to be able to answer the question.

Mental dissociation, in its turn, means the mind's failure to achieve comprehensiveness or coherence in thinking, its inability to recollect when it tries, and its powerlessness to follow up the meaning of anything beyond its most superficial aspects. It is not surprising, therefore, that the half-recollections of dreams should remain half-recollections, or that dream images should be accepted in childlike trustfulness without the smallest critical effort on the dreamer's part. There are exceptions, to be sure; indeed, we sometimes suppose in our dreams that we have reached the most profound conclusions by the most masterly reasoning. Our satisfaction, in these cases, however, is due to our own critical ineptitude, and that is not really an occult *Mantra* exorcising the enigmas of

existence. In any case, there is no reasonable doubt that this description holds of every twelve dreams in a baker's dozen, and imagery, therefore, has free scope in dreamland. It is taken at its face value, and the mind is powerless to begin to scrutinise its meaning. What is more, the condensation of imagery, as we have seen, is precisely what we ought to expect, for images always tend to become condensed like vapour on a spoon. If thought is quick, images are meteors; and this huddled throng of images crowding together like a rain of meteors in the sky is just the dramatic portrayal which we find in dreams.

The statement that the manifest content of a dream expresses a desire or libido is very misleading. In strictness of logic a dream is only its manifest content, and its meaning is just what the manifest content is taken to be, *i.e.* so much presented fact. It is the psycho-analysts who find the expressiveness, and they find it when they succeed in tracing a connection between the dream and the emotional source towards which the associations of the dream converge. There is every reason to suppose, indeed, that the emotion or the libido has the same relation to dreaming as emotion has to thinking or perceiving or imaging in waking life. Emotion often accounts for the selection of the objects which we notice. Suspicious people always find suspicious circumstances, because they have no eyes for anything else. Hopeful people notice cheerful things, and they see everything *couleur de rose*, because they do not notice the sombre tints. The emotions make mountains out of molehills, because they keep our attention away from everything except the molehills. It is the same with dreams and their latent content. The dreamer selects those images which are consonant with his desires or libido. The images he selects do not mean the libido, but the libido is the cause, or part of the cause, of his selection. Dream meanings, therefore, are not peculiarly occult; and the facts of dreaming support our earlier analysis.

Many will object still, however, and think that the crucial difficulty of creative imaging remains unanswered. There are no gorgons, and yet it is possible to have gorgon-images readily

enough. Snakes we know and women's heads we know, but not women's heads with snakes for hair. The elements of dreams and of all imagery, it is urged, may be half-recollections; their order and arrangement, broadly speaking, may be similar to that of perception or reminiscence; but the image itself, the gorgon or the dream palace or whatever it may be, is a wholly new combination of these elements, and so a new creation. This argument, to be sure, does not prove that images are mental. A house is not more mental than a glacier, although a glacier is constructed by nobody and a house is a combination of material which human beings have brought into existence; and it is hard to see how anything must be mental if its elements need not be. On the other hand, the principal problem of this essay is to consider whether things are literally discovered by the mind, and these arguments, it may be said, are amply sufficient to prove that creative imagery is not in any serious sense discovered fact.

As it seems to me, the natural inference from this line of argument is that the imaged gorgon is a combination of elements which the mind has put together. If so, the apprehension of this result of the mind's workmanship would be just the discovery of that special kind of product. The man who has built a hut perceives his handiwork in the same way as he perceives the hills or the sky, and if knowing and making are distinct in this instance they should also be distinct in the case of images. To combine half-recollections into a single whole is one operation; to apprehend this product is another operation. The second only is knowing, and might very well be discovery.

There is another side to the story, however. If it is a mistake to confuse between the elements of an image and the combination of these elements, it is also a mistake to suppose that the whole question turns upon the novelty of imaged combinations. The things of the fancy may fill us with wonder and delight because of their freshness, as when we read of

> Silver hammers falling
> On silver anvils, and the splash and stir
> Of fountains spouted up and showering down
> In meshes of the jasmine and the rose.

On the other hand, the freshness of these pictures only proves that we have never perceived this fancied arrangement of physical things; and it is not at all absurd to suppose that the poet's fancy was literally finding. The fancy does not discover *perceived* fact, but no one ever supposed that it did. When we speak of physical things we mean to include all that we can perceive in them and much more than that; but we perceive more in things than we can image, and we cannot ascribe the perceptual order of meanings to imaged things without becoming the victims of hallucination. Fanciful meanings are *image-meanings*, fancy's laws are the laws of imaged things, and its reality the reality of the world as imaged. Images, in a word, are parts of the physical world *imaged*, and that is what we discover through the fancy.

The trouble is that images are sometimes so similar to perceived things that we ascribe the same properties to both, and then we fall into confusion. There is some excuse for this since the most impressive images contain an illusion of perceptibility, and even the painter tricks us into the half-belief that we perceive the things of his fancy. It is seldom, however, that we are wholly deceived like the birds that pecked at the grapes of Apelles; and dreamers are not really tricked so long as they continue to dream. They would only be tricked if they slept, like a hare, with their eyes open.

CHAPTER V

THE WORLD OF COMMON BELIEF

These judgments may, in the strictest sense, be called *judgments of nature*....I acknowledge that, if we were to rest in these judgments of Nature of which we now speak, without building others upon them, they would not entitle us to the denomination of reasonable beings. But yet they ought not to be despised, for they are the foundation upon which the grand superstructure of human knowledge must be raised.

REID, *Intellectual Powers.*

IN this chapter I intend to deal with a set of questions arising directly out of the position reached in the three preceding ones. This conclusion may be summed up by saying that we perceive sign-facts which are parts of the physical world, and indicate other parts of it; and that we encounter the same world in recollection and imaging through our acquaintance with sign-facts partially identical with perceived ones, although corroded in feature and altered in significance.

This physical world, however, is a believed thing rather than a perceived or remembered one. Perception and memory are only plummets giving us a sounding here and there, and I wish to consider the systems of meanings which, taken together, are the believed thing which common sense calls the physical world. Belief, of course, is not confined to this world, for we may believe in pure mathematics or in abstract ethics; and although Newman has told us that 'no one will die for his own calculations' he has also told us that 'many a man will live and die upon a dogma[1].' On the other hand, we do believe in this physical world of common sense, and our judgment (as Hume said) 'peoples it[2].' We can perceive, remember and judge the same things, but our judgment apprehends

[1] *The Grammar of Assent*, 3rd ed. p. 90.

[2] *Treatise*, bk I. pt III. sect. ix.: "'Tis this latter principle which peoples the world, and brings us acquainted with such existences, as by their removal in time and place, lie beyond the reach of the senses and memory."

these things at its own level, and interprets the rudimentary meanings of direct memory and perception in a much more explicit fashion. And we have seen already that perception and judgments of perception are not the same. To choose Meinong's example, there is a difference between the red cross which is perceived and the belief that the cross is red[1]. True, the only possible evidence for the belief that the cross is red is the perception of the red cross, and this evidence, we are sure, is amply sufficient. None the less, a thing, in so far as it is perceived, is not a proposition, and propositions, in strictness, are what we believe. There is the same kind of distinction between perceived meanings and the set of propositions which interpret these meanings in terms of judgment.

It may seem very absurd, *prima facie*, to pay any attention to this believed thing which common sense calls a world, because science and philosophy pride themselves upon being better interpreters of fact than the plain man. What the world is in detail, what space and time are, what the constitution of matter is, must be inferred from the detail of what we perceive or remember, and require the most intimate partnership between rigorous deduction and unbiassed observation, between parsimony of principles and genius for experiment. On the other hand, the data of science and philosophy include judgments of perception as well as perception itself, so that even the most philosophical improver of common sense cannot avoid the problem altogether, and the reflective interpretations of common sense, however hasty and crude and dogmatic they may be, must have gold in them as well as dross. At the worst they are a muddy deposit which may be clarified by those who make a business of clarifying, and, at the best, common sense may be right in its main conclusions although impatient of detail, confused in its expressions, and halting in its proofs.

We believe (I think justly) that there is a physical world. This world contains the things we perceive and remember and expect, and it also contains a vast apparatus of things which connect these. This connective tissue permeates and encom-

[1] *Ueber Annahmen*, Kap. 6, 1st ed. p. 110 and *passim*.

passes these perceived things, and it is believed to exist just as certainly as they and much in the same manner. If a letter reaches me from America I can obtain some evidence about its journey from my own perception and from that of other people. The letter was perceived by the writer and by some postmen and sorters. Someone saw it when it was dropped into a bag, and someone saw the bag put on board a ship. The pilot who steered the ship out of the harbour used his eyes; the captain or the mates perceived the ship and the sea during the whole voyage; and so on. Still there was far more in the ship than the ship's company perceived at any moment, and more in the ocean than the watchers saw from the bridge. The ship, and the ocean, and the world itself are believed things inferred from these partial and intermittent soundings of perception and memory, even granting that these soundings have always a meaning beyond themselves. The world is a continuing thing, spread out and enduring; and its features, except tentatively and in shreds and patches, are not perceived but judged and inferred. The things which appear to perception also appear to belief, and philosophers should scrutinise these beliefs in the same spirit as they scrutinise perception. We perceive sign-facts, and we believe—what?

When Hume said that judgment 'peoples the world' he assumed without any question that belief attaches itself to the impressions of the senses and of memory[1]. We are tied down to these beliefs and constrained by them just as if our ideas were things (to borrow a phrase from Tolstoi). Hume did not suppose, however, that this sense of constraint, this firmness and steadiness of conception, was confined to perception and memory. He knew that it also belonged to anything

[1] *Treatise*, bk I. pt III. sect. ix.: "Of these impressions or ideas of the memory we form a kind of system, comprehending whatever we remember to have been present, either to our internal perception or senses; and every particular of that system, join'd to the present impressions, we are pleased to call a *reality*. But the mind stops not here. For finding that with this system of perceptions there is another connected by custom, or, if you will, by the relation of cause and effect...it forms (these ideas) into a new system, which it likewise dignifies with the title of *realities*. The first of these systems is the object of the memory and senses; the second of the judgment."

which we take to be causally connected with perceived or remembered things. Indeed, Hume meant by 'judgment' precisely this extension of perception and memory by causal interpretation, and he was concerned to show that all causal interpretations are extensions of the memory and senses. It is plain that he was right in this. Causal interpretation, to be sure, supplements observation and interpolates numberless unobserved links, but the world of common belief rests on perception in the end. If we can observe or remember that 'the stick began to beat the dog' we may be able to infer the chain of events which led to the old woman's difficulty at the stile and the rest of it, but without this observation or recollection the whole chain of inference would dangle without a support, and our ideas about the world would be as impotent as Baron Munchausen's method of descending from the moon, when he slid halfway down the rope and then made use of the upper portion that had become useless.

Assuming, then, that the physical world is a realm of existence in which fragments are perceived or remembered and the rest 'peopled' by things which are required to satisfy our causal interpretations of these fragments, we have to ask how far, in broad outline, this world may be said to be discovered. To speak more accurately, the physical world is that system of things which, if it exists, is the foundation of the truth of a certain set of beliefs, *i.e.* the beliefs based directly on perception and memory and the beliefs derived from these by causal interpretation. To believe in the existence of this world is to believe in the truth of these propositions, and plainly the most important question to ask is what these propositions are.

Nearly anyone would admit that these propositions, if they are true, are *about* the world or parts of it, and that the world guarantees and controls them. That admission, however, does not tell us *what* these propositions are, *how* they are about the world or *how* the world controls or guarantees them; and so we must ask these questions for ourselves.

Let us ask, then, in the first place, what these propositions are. What precisely is before the mind when anyone believes propositions like 'The cross is red' or 'Lalage has torn her pinafore'?

Adapting a term of Meinong's[1], we may say that propositions are asserted 'objectives.' An example will show what is meant. When we perceive a red cross we are justified in believing that the cross is red. 'That-the-cross-is-red' (or 'the-redness-of-the-cross,' if the reader prefers) is the objective of the judgment. The proposition 'The cross is red' *asserts* this objective, but anyone who questioned this judgment or began to consider 'Well! what about this redness of the cross?' would merely contemplate the objective without also asserting it for true. The indicative mood expresses assertion, while the optative or subjunctive moods do not; and yet precisely the same objective—this 'redness-of-the-cross'—is before the mind in all these moods.

Propositions, therefore, are asserted objectives; and these objectives in their turn are manifestly complex. The next step, therefore, is to find the elements of the objectives. An objective is the kind of fact which we express by a verbal noun, and a verb usually expresses a relationship between at least two things. That is clearly true in the case of Lalage and her pinafore, so perhaps we may turn to the more fundamental example of the red cross. The objective in this case contains a relation between the cross and redness, *i.e.* a relation between a logical subject or individual and a universal quality belonging to it. And that raises difficulties.

It is clear that the red cross is an existing thing and that redness is not. 'Redness' does not do any work. It does not even keep its place through inertia, for it has no place and no inertia. It is only a universal. So much is clear, but the very obviousness of this analysis is beset with difficulties. The objective, we have said, is complex and contains a universal related to its logical subject. But what is this subject? If it is the red cross, the subject, so to speak, is red already, and there is therefore no need for, and no value in, the universal. If, on the other hand, the logical subject is the cross unqualified by redness, the trouble is still greater, if that be possible. For the cross is red, and it is never unqualified in fact. The supposed subject would, therefore, be a nonentity. Again, the red cross

[1] *Ueber Annahmen, passim.*

is perceived. It is just one thing, and to analyse it into two things is the merest makeshift.

Perhaps we may circumvent these difficulties by considering another aspect of the affair. We perceive the red cross and we believe that the cross is red. Our belief, we say, is *about* the red cross, and the perception of the cross is the evidence for the belief. What, then, is the relation of the belief to the percept, and in what sense is it *about* the thing perceived?

As we have seen, we perceive physical things, and we do not, strictly speaking, perceive mere percepts any more than we expect expectations or promise promises or intend intentions. Perception, it is true, like any other mode of apprehension, implies certain limitations in our acquaintance with the thing, but although we apprehend things in this limited fashion we never attribute these limitations to the things themselves. Thus although the red cross is perceived, it is not a mere percept, but a thing. The percept, on the contrary, is only a sign-fact, in part literally identical with the thing, in part significant of certain further aspects of the thing's thinghood.

Now this same thing that we perceive is also the subject about which we judge, and the universal 'redness' is *about* its subject simply in the sense that the thing is characterised by this universal quality just as it is characterised by many other universal qualities. We refer to things in judgment, not to objectives, precisely as we perceive things and not percepts; and an objective of this kind means a thing in so far as it is restricted in the special mode of judgment, while a percept is the same thing in so far as it is restricted in the special mode of perception. Judgment always selects some one of the many universal characteristics which things have. Perception does not select in this fashion although it selects in another fashion. None of the restrictions implied in either judgment or perception is attributed to the thing itself, and, at the same time there is no need for supposing that things themselves are not literally all that they are perceived to be and all that they are judged to be, though they are not limited to the features or properties which perception or judgment is capable of selecting.

Let us consider some of the objections to this position.

Those who believe that we perceive percepts (or sense data) usually regard this percept as an ultimate of ultimates, so much pure fact wholly self-enclosed and incorrigibly real. This view, I have tried to show, is mistaken, but it would vitally affect our theories of the world if it were true. As we have seen so very often, it is plain that a thing endures although it is perceived intermittently, while it is equally plain that a percept cannot endure, simply because it is confined to intermittent apprehension. Moreover, it is plain that a percept cannot be identical with an objective since the objective is judged and not perceived, since the percept is particular while the objective contains a universal, and since the percept has not the kind of complexity which the objective has. For these and similar reasons writers of this school give a totally different analysis of the facts from the one we have chosen. A judgment of perception, they say, is the apprehension of an objective which corresponds to a percept. The objective, as a whole, is *about* the percept, and the percept is never a constituent of it.

As it seems to me, anyone who holds this theory is forced to relinquish the most certain thing in this puzzling matter. What seems to me most certain is that I discover the character of the thing I perceive in all true judgments of perception. 'This book which I see is red.' If I really mean what I say when I make this assertion, my belief must refer to the book itself, and I must also perceive that very book. The theory before us ignores the book altogether, and cheats us with objectives and sense data instead; and this omission seems to me a sufficient refutation of it.

A second objection runs somewhat as follows. When we assert that the cross is red, the 'is' in our assertion is unintelligible unless it asserts identity; and that is inconsistent with our analysis. For 'redness' is not a part of the book, like one of its pages, still less identical with the book; and the book is a thing and not a collection of universals like redness, heaviness, and the like.

This argument raises many problems concerning the status of universals and some of these must be postponed until the

next chapter. Its main purport, however, can be examined independently of these investigations. Redness, I take it, is a characteristic of many red things—of sunsets and uniforms and sealing wax and new-born infants, for example. When we say that any of these things is red, we *mean* that it is red and we do *not* mean that it is identical with redness. The 'is' of predication is not the 'is' of identity. What is it, then? Why, the 'is' of predication.

According to a third objection 'redness' is only a concept, and consequently only a mental gloss upon things, not a discoverable property of them. We perceive reds, not redness, and redness itself is only a product of mental comparison. It is the result of mental experiments which may be utterly capricious, for, if we choose, we may compare anything we like from carburetters to chalcedony, and from the mad hatter's tea-party to the debates on Olympus.

There is no need for profound thinking to answer this objection. Certainly we have to conduct intellectual experiments in order to find out what 'redness' is, and we have complete liberty concerning the things that we choose to compare, but these experiments, like any others, are a means of discovery, and the results of the experiments are made for us and not by us. The air in ancient Corinth contained its twenty per cent. (or thereabouts) of oxygen before Priestley discovered 'dephlogisticated air[1],' or Van Helmont distinguished *gas* from *blas*. Similarly, redness is discovered to be a common property of blood and of sunsets whenever we choose to make this experiment in comparing.

A fourth objection still remains. Judgment, we are told, confounds the unity of things by dividing their substance. It gives us a series of items in an inventory, like a grocer's list. In fact vermilion is red and heavy and so forth, but it is all these in one. In our judgments we take these items separately, like the rosy cheek and coral lips and snowy brow of a Jacobean poem. The dead hand of analytic separation is

[1] Stephen Hales had priority in this discovery, but his researches were not followed up.

heavy on all judgment, and this paralysing analysis, like a speck of rust, corrodes all the linen.

Now it is true that judgment selects items, but the selection, unless it is wholly misconceived, does not impair a thing's integrity. To say that vermilion is scarlet and heavy does not mean that it is *two* things, a scarlet thing *and* a heavy one, somehow connected together. It is just one thing all the time, scarlet and heavy and much besides; and the analysis of these properties never divides the substance.

The point is fundamental, for judgment is incomparably the most important means of apprehending things, and if things are not really and ultimately what they are judged to be, then farewell to serious thinking. The implications of perception and memory are worth very little unless they are followed out into a chain of judgments, and the chain itself is worthless unless each several link in it can be proved. He who trusts himself to logic must trust altogether. He cannot seriously, like the instrumentalists or Mr Bradley, step into the stream with one foot and keep the other on the bank; for the bank is not firm enough and the stream too masterful. According to Mr Bradley, logic is forced to assume what metaphysics is forced to reject. That is marching with the Pretender and investing in the Funds. All thinking must assume what logic assumes, and realism, at bottom, is just the assertion of this principle. Indeed, we might define realism as the theory of knowledge which literally accepts all the logical assumptions which Mr Bradley sees to be involved in logic. The most important of these assumptions are the following. Logic, Mr Bradley says, is forced to assume that the processes of distinguishing, comparing and constructing do not modify their data[1], that attention, retaining and holding together before the mind do not alter the content apprehended[2], and that the Identity of Indiscernibles is true in the sense that 'so long as an ideal content is identical no change of context can destroy its unity[3].' It would not be easy to give a better definition of our thesis.

[1] *Principles of Logic*, p. 506. [2] *Ibid.* p. 502. [3] *Ibid.* p. 264.

Perhaps we should linger to notice a consequence of our position before proceeding to a further description of the world of common belief. Just as the judgment that vermilion is red and heavy seems, on its first aspect, to disintegrate the one perceived thing into a list of separate items, so a chain of judgments may seem to separate the world itself into so many separate rigidities. It is important to notice that this consequence does not follow. It is logically possible, to be sure, that the world is a loose, disjointed, strung-along affair, but this logical possibility is certainly not a logical certainty, and even if Caird and his followers were right in maintaining that the world is a 'seamless unity,' the chain of logical inferences would not therefore be impugned. It does not follow that linen is rent into whiteness and glossiness merely because we are able to judge truly that it is both white and glossy. It is white, glossy linen, and the predicates of these two judgments characterise one and the same piece of linen without doing violence to its unity. Each is partial but neither falsifies. Similarly any chain of true beliefs which characterises different portions and features of the world is partial but does not falsify. The world need not be a mere collection just because it can be parcelled into sorts, and it need not be strung along in a chain simply because true beliefs are linked together chainwise. The world would have room for this chain of beliefs even if it were a seamless unity, and neither the links nor the chain need be false just because the world itself is more intimately knit than any chain of items.

Summing up, then, we may say that the world of daily life is a believed thing rather than a perceived or remembered one, although some of the things in it are perceived or remembered. It is a set of connected things having the characters recognised in judgment; and this explains the sense in which the propositions in which we believe are *about* things and the sense in which things *control* our beliefs.

We have also seen that the world contains the structure and implications of logic, precisely because it is thinkable. Its empirical properties, however, are not merely logical. The logical connection of subject and predicate, for example, does

not explain the yellowness of ochre or the blueness of the sky, and the logical relation of difference does not account for the empirical fact that Warsaw is not Paris or that geese are not swans. This empirical connectedness and difference, therefore, which is not a merely logical thing, ought to be considered.

We know that ochre is yellow because we perceive yellow ochre. Perception, therefore, is our warrant for believing in this empirical proposition, and perception similarly entitles us to believe in many other empirical propositions which assert a connection between things. When we believe that the pea is under the thimble, or that the report comes after the flash, or that Lalage has torn her pinafore, our beliefs are either inferences from perception or directly based upon it, and if they are inferences, these inferences, in their turn, depend upon the direct perception of empirical things empirically related. We may be wrong about the pea and the thimble, but at some point we perceived these two things in a certain spatial relation. We may have to remember the flash when we hear the report, but some intervals of time may be apprehended in a single span of perception. We may have misjudged Lalage, but we have often perceived children and puppies tearing things to pieces.

We interpret the world spatially, then, and we have to distinguish between the space of direct perception and the space of belief. As we have seen, the things we perceive are obviously extended, or, at any rate, things which are seen or touched are extended, and also toothache and bruises when we feel them. Perceived things, moreover, are suffused with a perceived meaning, and this, in its turn, indicates a wider spatial context. The order of space in which we believe is an interpretation of the sign-facts perceived or remembered. It is based on the properties and the meaning of these sign-facts. Common sense, it is true, does not think out these interpretations to their full conclusion, and consequently it is puzzled by much that philosophers and physicists say about space. It is offended by Flatland, and amazed by Einstein, but the truth is that the common-sense belief in a single spatial world in three dimensions is too little developed to be able to discuss

such points. It is not in a position to argue whether space is absolute or relative, whether 'the space of the real world is a space of six-dimensions[1], whether the older physics or the Quantum theory is in the right[2], and so forth. The world is in one space for common sense because there is a general spatial order at least within the stellar universe, and it has three dimensions because one man can go east and another north and another go up in the air. These meanings are found in perception, and common sense carries this perceptual meaning very much further than perception can. If its orbit is too narrow for science it is wide enough for most ordinary purposes.

The perceived meaning of extended things, then, cries out for and receives the interpretation of judgment, and the beliefs so arising commit us to the belief in a general spatial order. We are constrained to interpret things in terms of spatial continuity. The margin of perception, to mention no other circumstance, forces us to conclude that any perceived thing is of a piece with its surroundings, and that these surroundings do not come into being when we attend to them closely, although they are perceived but dimly on the margin and beyond the margin are not perceived at all. The spaces we perceive are filled spaces, that is to say, there is continuity within them; and when our attention passes from one thing to another the interval is also filled space. We interpret these indications of perception when we believe that the world as a whole is spatially continuous in the same sense as any perceptible portion of it, and our spatial explorations in the way of perceiving are subject to this interpretation.

Similar arguments hold of time. The world of common belief is a world of continuants which are either simultaneous or successive in the general order of time. The perception of transience, with its order of earlier and later, is the basis and the empirical warrant for this belief, and the common order of time is the correlation of all perceived simultaneities and successions. Common sense, it is true, has not reflected very

[1] Russell's *Mysticism and Logic*, p. 138.

[2] Cf. J. W. Nicholson's paper in *Problems of Science and Philosophy*, Aristotelian Society, Supplementary Vol. II, 1919.

deeply upon time, or upon its continuity and its common order. It does not cross-examine the Man with the Scythe very sharply, and therefore it is not prepared to say whether the structure of time may not be corpuscular[1], whether the measurement of time does not always move in a circle, whether the time of the stellar universe may not be only a sort of local time, whether time and space are not indivisibly united in the fact of motion, and so on. It does assume, however, that every perceptible event is either simultaneous or successive as compared with every other perceptible event, that the intermittence of perception does not annul the temporal continuity of any continuant, and that any continuant has just one history. These assumptions, taken together, sufficiently define the beliefs of common sense, and the last of them sums up the position. If we want to know whether Kaspar Hauser was really a wild man of the woods we have to trace his biography, and if that can be done the problem is solved, just because he had only one biography. A ship has only one history, and therefore we should be likely to discover what argosy was wrecked at Tobermory if we could trace the history of every other ship in the Armada.

Our belief in the world, then, is an interpretation of the things and events we have perceived or remember. It is reflection following out and giving full weight to perceived meanings. The world, it is true, is richer than our judgments, because we perceive so little and reflect so ill; and it is far richer in qualities than its logical structure and the order of space and time imply of themselves. For these are only the skeleton of a body which has flesh and blood and is clothed besides. Common sense, however, uses at least one other general principle of interpretation, since it interprets things causally, and we must therefore examine this principle. Under causal interpretation I mean to include causal correlations like the growth of stamens and pistils in a poppy, causal laws like the law of gravitation, and causes and effects like the stroke of the bat that sends the ball to the boundary.

As all the world knows, Hume made the difficulties of

[1] Russell's *Mysticism and Logic*, p. 129.

causal interpretation so very clear that no philosopher coming after him has any excuse for neglecting them[1]. The principal counts in Hume's indictment are that causation is never perceived, and that it cannot be inferred from the perceived phenomena without an immense fallacy. Although we say that bread nourishes, we never observe any mysterious tie between the bread and the formation of tissue. We can only observe a uniform sequence between the swallowing and digesting of the bread and the subsequent formation of tissue. This uniform sequence may be uncontradicted in our experience. Bread always nourishes if we assume that when it does not nourish it is either not bread or rejected by the stomach. But if the causal action of the bread cannot be observed in any single instance, it plainly cannot be observed in a series of instances, and the problem, therefore, is how the number of instances (granting that there are no known exceptions) can guarantee the causal interpretation when no single instance does so.

According to Hume, this inference from repetition of instances to their necessary connection is quite unjustifiable. The repetition neither discovers nor produces anything new in the phenomena, and yet we infer that bread must always nourish and fire always consume, because we have repeated experience that they have done so in the past. This inference can scarcely pretend to be valid. If we say that bread will nourish in the future because it *must* nourish, we have begged the question; and if we say that fire will continue to consume in the future because it has always consumed in the past, our inference manifestly outruns the evidence.

Those philosophers who had wit enough to see the force of Hume's difficulties have usually attempted to answer him in one or other of two ways. The first answer is that causality is an *a priori* law somehow involved in the possibility of things. Hume answered this contention when he pointed out that there is no contradiction in denying causal laws. There is no logical contradiction in supposing that bread may cease to nourish without any reason whatever; and that seems final,

[1] *Treatise*, bk I. pt III., and *Enquiry concerning the Human Understanding*, sect. vii.

even granting that Kant gainsaid it. According to Kant there is some sort of intrinsic connection between causation and the hypothetical judgment in the logical category of relation[1]. This contention, however, is only a *tour de force* inspired by Kant's belief that every 'principle of the understanding' must have a twin brother in the logical table of judgments.

The other attempted answer to Hume maintains that we can directly perceive certain causal connections in our own persons. We feel that we can enforce, and also that we can be compelled against our wills. This reply, however, does not wring Hume's withers. These feelings of compulsion and spontaneous enforcement are highly capricious and irregular, and they cannot justify any inference to that necessity for uniform behaviour which Hume took to be the meaning of causality. Hume might well have thought this argument sufficient in itself, but he supplied many other arguments in case any one should want them, like the nine and twenty excellent reasons which the Mayor of Coventry gave for refusing to ring the bells in honour of Queen Elizabeth after he had stated '*Imprimis* we have no bells' by way of preface.

These arguments are set forth in his *Enquiry*, §§ 52 and 53, where he asks whether we know the secret union between mind and body, whether we know why the will controls the fingers and does not control the liver, whether we can really discern the connection between volition and the nerves, muscles and tendons of the body, whether we know the precise manner in which the soul creates images in the fancy, whether we can tell how the mind commands itself at some times and fails to do so at other times, or how men have greater self-control in health than they have in sickness. Only experience, Hume argues, can tell us what we can do and what we cannot do, and this experience is never the perception of necessity. That is surely clear, and we might add (if it were permissible to labour the point further than Hume himself) that even if, *per impossibile*, we had this direct acquaintance with necessary connection in our own persons, we should have very little reason

[1] *Critique of Pure Reason*, Analytic of Conceptions, Sections II. and III.

for extending it by analogy to the inanimate world. Do we seriously suppose that we are acquainted with the dynamics of impact just because we can belabour a punching-ball? Because we sympathise with Tantalus, have we any right to maintain that the tides are due to the moon's unavailing thirst for the sea?

Hume did not deny, of course, that we believe in causes. He was too indolent, he said, not to believe that fire burns, although he had proved that this belief had no rational grounds[1]. He peopled his world by judgment (including causal interpretation) like other folk. The problem is therefore whether this peopling of the world has any grounds which Hume overlooked; and this question is clearly of the first importance. Causal interpretation, indeed, is nine parts of the world of common belief. We read a letter and infer that it came over the seas, we see the sun and infer that rays from it must reach us through some medium. The postal system and the solar system are believed things based on the causal interpretation of a few vestiges of perceived fact. Causation, in a word, is our clue to the continuous filling of space and time.

Hume's analysis was defective because he overlooked the perceived meaning of perceived things. He admitted that we perceive succession directly, as well as figure, colour and sound; but he maintained that all perceived things are loose and separate, and that we always perceive bare conjunction without any hint of connection. Both these assumptions are false in fact. We perceive things within a context, and all perceived things have a meaning when they are apprehended. What is more, this meaning is not mere conjunction (or bare togetherness in space and disconnected succession in time). The context which signified in perception is not a mere skeleton of conjunction, because we never perceive empty space and empty time; and the meaning directly perceived in the filling of space and time has the seeds of causality in it.

[1] *Treatise*, bk I. pt IV. sect. vii.: "My natural propensity reduces me to this indolent belief in the general maxims of the world." "If we believe that fire warms, or water refreshes, 'tis only because it costs us too much pains to think otherwise."

Causal interpretation implies the irrelevance of mere space and mere time. Time and space, to be sure, are not irrelevant in one sense. A plant takes time to grow, and needs room to grow in, but the causal interpretation of its growth depends upon the assumption that the rate of its growth and the stature which it attains depend upon the kind of thing which it is, the degree in which it can keep itself alive and utilise surrounding things, and so forth. Things are in space and in time, and therefore their actions and reactions are spatial and temporal too; but empty space and time are subordinate in all causal determinations because the determining factor in the behaviour of things is taken to be the properties of the things themselves. Neither position by itself, nor succession by itself, nor these twain together can explain the causal connectedness of anything; and Hume's argument shows very clearly why it must be so. His argument also shows that causal connectedness means nothing without perception and experience.

In point of fact, however, perception does contain a causal meaning, and so does the experience of voluntary movement. This perceived causal meaning, to be sure, is *only* a perceived meaning, unverbalised and very easy to interpret falsely when we reflect upon it, but it contains a presumption which is the nucleus of a principle. To state it broadly, this presumption is that anything which occupies a place thereby keeps other things out and makes a difference to other surrounding things, and that any continuant changes or remains identical because of the kind of thing it is and because it is set in a certain environment. In particular cases we can perceive things playing their part, making a difference to other things or clinging temporarily to their individual being; and this fact of perception is the ultimate basis of causal interpretation.

This broad presumption, it is true, does not of itself justify the transition to unvarying causal laws. From the principle that everything makes some kind of difference to other things, or that every happening has some kind of explanation in its surroundings, it is quite impossible to infer that all causation is regular and uniform. Simply because a thing plays its part, it does not follow that the same thing always plays the same

part in the same surroundings, still less that the same kind of thing always plays the same part. We never perceive *necessary connection*, although in some cases, after long experience, we come to expect some results with very great confidence indeed. On the other hand, if we grant the presumption (even without the certainty) that everything which exists plays a part in the world, it is reasonable for us, and even necessary, to consider what part it plays; and if the result of this enquiry is to show, on the whole, that the same kind of thing always seems to play a uniform and regular part, there is no coercive reason for rejecting this specific interpretation of the causal principle.

When we are scientifically minded we assume that all physical events are regularly determined in this way, and probably that psychological events are causally determined too. Indeed we argue, not only that every physical event is a member of some uniform causal series, but that it is highly probable that we can discover by our methods of elimination *what* causal series it belongs to; and we explain apparent exceptions by supposing that there always is a cause for them even although we have not had the luck to discover it. Common sense, however (unless it is content to echo the trumpets of science), is not nearly so positive in its experimental determinism. It is quite ready to admit that some things are as capricious and irregular in their behaviour as a woman's wit. Indeed, common sense often supposes that the human will is a citadel of irregularity, though never that it is disconnected with other things or that it is not even an *irregular cause*. Still, unless changes are regular there is no use in expecting, and common sense has its expectations fulfilled often enough to continue expecting with a good heart. The belief in these detailed expectations is just the world of common sense, and therefore it is very important to consider whether these expectations can or cannot be justified.

Necessary connection is not a perceived meaning, and neither are the causal laws of science. Galileo had to drop the weights from the tower at Pisa in order to prove that the light one and the heavy one took the same time to fall. The tested

uniformities of science do not lie on the surface and do not leap to the eyes like colour or shape. *Per contra*, some of the acquired meanings of adult perception are of the same type as scientific generalisation, and even the prelogical generality which M. Lévy-Bruhl attributes to savages is very often an instance of the same kind[1]. The savage belief that foreigners bring pestilence or bad luck is an obvious application of the Method of Difference, though it may be very hard upon some of the visitors. Savages believe that fire burns and that water quenches it for the same logical reasons that constrain civilised thinkers to believe that prices must rise when goods are scarce or that dominants and recessives will mix according to the proportions of Mendel's formulae. These common-sensical expectations, it is true, are less carefully sifted than the scientific ones, for common sense does not show any intemperate zeal in searching for negative instances. But the principle is the same, although the applications of it may be hastier than they ought to be.

Our contention is that perception always has a general precausal meaning, that it often has a specific precausal meaning, and that this precausal meaning is of the same type, logically speaking, as any causal generalisation in science. Hume was wrong, therefore, in his analysis of the observed facts; and he may also have been wrong in his inference that causal laws are only irrational habits of expecting. I suggest that he was wrong in maintaining that repeated experience discovers nothing new in the phenomena. We all know that familiar things are not the same to our perception as they were when we perceived them first, and this truism also holds of causal meanings. Adam may not have known what fire would do, but his children have a very shrewd idea. Fire has acquired a meaning for them, and it has acquired a specific causal meaning. Why therefore should we deny that the repetition has discovered something new? It does not discover

[1] *Les Fonctions mentales dans les Sociétés inférieures, passim.* M. Lévy-Bruhl believes that this prelogical mind of the savage is different in kind from the reasoning mind of civilised people, but his grounds for drawing this distinction are extremely flimsy.

a 'mysterious tie,' to be sure. Causes are not magic filaments, and anyone who looks for such filaments may expect to be disappointed. He need not expect to find *more* than causal connection since there is nothing more to find.

Indeed, in the last analysis, we seem to have the same kind of evidence for believing in the causal properties of things as for believing in any of their attributes. If we perceive that *this* water is limpid, may we not also perceive that *this* water cleanses? And if we cannot perceive that fire *always* burns, we have surely no right to say that *all* fire is ruddy just because some particular flame is. This meaning also has to be acquired. The ultimate difference in the case is that properties belong to things while causal connection is a relation between them. Related things are perceived, however, and their relations are causal as well as spatial and temporal. If perception is evidence that a flame is ruddy it is also evidence that fire burns.

Such, then, is the world we believe in. It has a logical structure, and a general order of space and time. There is always some connection in it, and frequently there is regular connection. That is all we discover at the plane of common experience, and there is no need to discredit this discovery so far as it goes, although there is utter need and unlimited opportunity for going further in the way of reflection and experiment. Some philosophers argue, it is true, that our ideas must really be more penetrating than common sense ones if the common sense point of view is itself possible. We could not have any idea of causality, they say, even a halting idea and irresolute, unless the law of universal causation were true to its marrow. That seems an overstatement. We could not have the idea of regular causes, I suppose, unless there were some approximately regular connections in past experience, but if vermilion is usually heavy and politicians usually deceitful that in itself would be a sufficient psychological basis for supposing necessary heaviness or necessary deceit: and if this approximate regularity were all the regularity that exists, our ideas, in all probability, would be very much what they are now.

Perhaps I should append some remarks on error. Those who maintain that we judge objectives and not facts, usually say that there is no room for error except upon this assumption[1]; and they point out, very justly, that error is the familiar spirit of true belief. Truth is not a mint with an image and superscription that falsity lacks. It has not even a *cachet* which only the learned can descry. On the contrary, false propositions are believed as well as true ones; and they are the same, to our inspection, as the true ones. Most of us believe that James IV perished at Flodden, but many believed in the legend that he died of old age in a monastery, just as many believed in similar legends concerning the death of Barbarossa, or Gordon, or Kitchener. If judgment characterises the real James IV, how can it characterise him falsely? Yet there are certainly false objectives, and propositions, in themselves, do not guarantee their own truth or falsity. We have to suppose, therefore (according to this argument), that objectives are judged and not fact itself. If fact itself were judged there would be false facts; and that is nonsense. On the other hand there are false objectives, and it is reasonable to hold that true objectives correspond to fact while false ones do not.

The trouble about explanations of error is always in the beginning. Once it is admitted that true judgments are indistinguishable from false ones, there is just as much difficulty in explaining why false objectives should appear to correspond to reality as in explaining how reality can appear falsely. Either we know this correspondence directly in some cases or we do not. If we never know it, truth is mere supposal. If we know it, we must know both terms of the correspondence. We must compare the fact with the objective, and this comparison is itself a judgment. If facts cannot be judged, therefore, the relation between facts and objectives cannot be judged; and, in that case, what becomes of the theory?

It is impossible to explain error. We must simply accept this eternal possibility and try to be as careful and consistent

[1] Cf. Russell, 'On the Nature of Truth and Falsehood,' in his *Philosophical Essays*.

as we can. Apprehension always has the seed of misapprehension in it, and judging the chance of misjudging. 'Explanations' of error only stave it off for a little. We may, if we choose, try to explain the mistake about James IV by saying that all the elements in this false judgment may be true in some other judgment. James IV did not die in a monastery, but Charles V did. It is true, then, that there are monasteries, that some monarchs have died in them, and that James was a monarch. But James did not die another man's death, and his death in a monastery is not less of a sham because Charles really died in one. Our only comfort is that the eternal risk of error is not an everlasting presumption in its favour.

CHAPTER VI

PRINCIPLES

Let somebody now demonstrate this *Triangle* described in the *Matter* to have its three angles equal to two right ones; Why yes, saith the Soul, this is true, and not only in this particular *Triangle* but in all plane *Triangles* that can possibly be described in the *Matter*. And thus, you see, the Soul sings out the whole Song upon the first hint, as knowing it very well before.

HENRY MORE, *An Antidote against Atheism.*

PHILOSOPHERS may be divided into two classes, the class for whom facts are just facts and the class for whom facts are only suggestions. Those who belonged to the first class used to be called empiricists, and the second class, in its extreme form, includes Hugo of St Victor, for whom physical things were literally nothing but symbols of the Christian revelation, and Professor Macran, who says that "the first step in philosophy, though by no means the whole of philosophy, is idealism or the denial of the fact[1]." Now realists, I suppose, are as empirical as they dare, but however empirical one may be, it stands to demonstration that the most empirical thinking is logically bound to accept general truths as well as particular truths of fact. The proof is simple and Mr Russell has put it so simply that the best thing I can do is just to quote him:

Of course it is clear that we have general *propositions*....We have such propositions as 'All men are mortal' and 'Some men are Greeks.' But you have not only such *propositions*; you have also such *facts*....You cannot ever arrive at a general fact by inference from particular facts, however numerous. The old plan of complete induction, which used to occur in books, which was always supposed to be quite safe and easy as opposed to ordinary induction, that plan of complete induction, unless it is accompanied by at least one general proposition, will not yield you the result that you want. Suppose for example that you wish to prove in that way that 'All men are mortal,' you are supposed to proceed by complete induction, and say 'A is a man that is mortal,' 'B is a man

[1] *Hegel's Doctrine of Formal Logic*, Introduction, p. 13.

that is mortal,' 'C is a man that is mortal,' and so on until you finish. You will not be able in that way, to arrive at the proposition 'All men are mortal' unless you know when you have finished. That is to say that, in order to arrive by this road at the general proposition 'All men are mortal,' you must already have the general proposition 'All men are among those I have enumerated.' You can never arrive at a general proposition by inference from particular propositions alone. You will always have to have at least one general proposition in your premises[1].

We must accept principles, therefore, even in an empirical inventory of fact; and there is nothing unusual in this procedure; for the world of common belief, as we have seen, is just an interpretation of perceived or remembered fact in the light of certain principles. Common sense, however, *uses* general principles without reflecting very deeply upon them. It is a world of *axiomata media*, not of 'Αρχαί; and therefore, as a Hegelian would say, the reach of common sense is greater than its grasp. The destiny and the ineluctable privilege of philosophy, on the other hand, is to pursue these principles so far as thinking can, to reach categories (or first principles), and to be an untiring critic of these categories.

I shall not attempt, of course, to deploy the categories in full array. No one but a fool or a demi-god would try to do so in a few pages. The time has passed since courtiers wanted thumb-nail sketches of ultimate metaphysics, since sovereigns requested the quintessence of truth before breakfast, or since Mme de Staël asked Fichte for a complete revelation of the *Ich* and the *Anstoss* in five minutes. Instead of treating metaphysics in this princely style, I shall be content if I can answer a few questions about principles, and especially if I can sketch in outline what kind of being a principle or a category has.

To say that a principle holds of certain facts is to say that these facts are instances of the principle; and an instance is something which can be logically derived from its principle. Such principles, plainly, may themselves be instances of more fundamental principles or they may not. If they are, they are *axiomata media* in Bacon's language. They are dependent

[1] *The Monist*, vol. XXIX. No. 2, pp. 198–199.

principles, intermediate in a possible hierarchy. If they are not, they are logically primitive; that is to say, they are Ἀρχαί, or first principles, or categories.

There is always considerable difficulty in knowing for certain whether a principle which seems to be primitive may not really be derivative. On the other hand, it is usually comparatively easy to have an inkling, at least, of the whereabouts of a first principle. Indeed, we know this whenever we find that we always need to make a certain kind of assumption in order to avoid a fallacy, however ingeniously we may twist and turn our arguments: for then it is certain that there really is some dogged and elusive principle which is always present although it is sometimes hidden and often disguised. The notion of value, for example, is logically primitive in any system of ethics. If you say that one thing is better than another because it is more highly developed, you must first assume that development is necessarily improvement, *i.e.* that there is always greater value in a thing in proportion to the degree of its development. If, like St Thomas, you believe that a thing is good in the measure in which it is 'natural,' you require St Thomas's premiss: *Quod omne agens agit propter bonum*[1]. If you argue that the good is what ought to be desired, you need a premiss to the effect that everything that is better than some other thing ought *therefore* to be desired before it, and conversely. Value or goodness in a word must always be included in the ultimate premises of ethics.

Granting, then, that there are principles and first principles, we may proceed to consider certain questions about them, and we may begin by considering how they are discovered in experience. One of the favourite arguments of historical empiricism is that experience begins without principles and that nothing can be apprehended intellectually unless it has previously been sensed. Now it is true that the reflective recognition of principles comes late in psychological development, if, indeed, it ever

[1] *Summa Philosophica*, liber III. caput iii. St Thomas tries to derive this proposition from III. ii., *Quod omne agens agit propter finem*, on the ground that the *finis* of anything is *conveniens ei*. But then he quietly begs the point at issue by saying 'Quod autem conveniens est alicui est illi bonum' (iii. *ibid.*).

comes; but principle and instance are correlative terms, and the use of principles comes very early indeed. We begin, in fact, with inarticulate principles and come to find out what they are, and, in the same sense, we begin with inarticulate instances and come to find out what *they* are. Prelogical generality has a double aspect affecting principle and instance alike, and it is not difficult to see that prelogical generality comes very early indeed. The child who calls all men 'daddy' classifies all men together, and at the same time does not fully appreciate the difference between his father and all other men. The savage who tries to express all his thoughts with a vocabulary of some four hundred words, generalises when he speaks, but the reason is that he ignores important differences in things or, at least, cannot express them. Those who speak indifferently of trees when they mean to refer to beeches, oaks and poplars, may never have noticed the differences carefully, and in that case they are not more reflective than botanists but less so, because they have not examined the facts. Mill's village matron who supposed that the medicine which had cured Lucy of whooping-cough must also cure Mary's chilblains[1], generalised; but she generalised very badly, because she had not examined the instances closely enough. The process of psychological development is the passage from prelogical generality to the logic of principles, and not from an explicit knowledge of particular facts to certain mysterious 'high priori' categories. Principles are discovered *pari passu* with their instances.

When this is granted we are plunged at once into a far more perplexing and important set of problems. What *are* these general facts? What kind of being have principles or categories?

It seems to be evident that general facts do not exist; for whatever exists is particular, and principles are universal. When I learn on the authority of Euclid, for example, that 'Of all rectangles which have the same perimeter, the square has the greatest area,' my information may indeed apply to *this* rectangle and to *this* square, but the general fact itself

[1] *System of Logic*, bk II. chap. III. § 3.

concerns *the* rectangle and *the* square. It is applicable to particular existing things but it does not concern them directly, because the existence of instances *in rerum natura* is no part of the proof or of the being of the principle. Universals are the stuff of general facts and universals do not exist. Red things exist, but not redness.

In view of these reasons we are commonly told that universals do not exist but merely *subsist;* that particular things like tables or churches or trades unions *exist;* and that both *have being*. Being, therefore, is a general term which describes both existence and subsistence, and it describes the common relation which existing things and subsisting ones have to the mind. Being is always determinately so-and-so and confronts the mind in this determinate character; it always constrains the mind; it is always objective in the sense that this or that is true of it without appeal. In respect of knowledge, therefore, the status of existing things is very much the same as the status of things which merely subsist; indeed the only important difference is that the former may be perceived or felt and that the latter cannot. There is the same kind of constraint and the same kind of confronting when I judge that sugar is sweet and when I judge that $a^m \times a^n = a^{m+n}$. The general proposition and the existential one are discovered by the mind in the same sense, both propositions are true independently of our thinking, both are equally binding, equally indisputable, and equally incorrigible.

This contention seems very just, but it plainly gives rise to a great many problems. Even if a dualism between existence and subsistence is the last word in this important matter, it is clear at least that the relation between these two divisions of being needs to be considered very closely indeed; for some general facts hold of all existent fact. To take the most obvious point, existing things would not be thinkable at all unless logical principles at least were applicable to them. Existing things are what they are and are not other things, and the laws of identity and contradiction are the most general of all general facts. Let us consider, therefore, whether it is possible to avoid this dualism.

In the first place, an attempt may be made to dispense with universals altogether. The appearance of universality, of course, is beyond question, and we have already seen that there are general facts. None the less, attempts are frequently made to show that universals have no independent status, and that they are only parts of the world of existence. Most of the materialisms which delight tough-minded gentry are committed to this view, and most of the evolutionisms which attract 'advanced thinkers.' This problem therefore may even have some general interest despite the austerity of its subject.

Those who try to reduce universals to a variety of existent fact have to choose one or other of three roads. They may hold either that universals are only attenuated existents, or that they are functions of certain privileged existents, or that they are a kind of organisation of existence. Let us consider these views in turn.

The first view is the most usual. Universals, we are told, are mere abstractions and they are nothing else. In this character they are treated with contempt, or pity, or sorrow, according to the critic's mood. Your full-blooded critic is always scornful. He prefers a man to his wraith, lusty things to anaemic ones, Tom Jones to poor Tom's a-cold. Other critics are more merciful. These poor abstractions, they tell us, are as true as abstractions can be, and they are often very useful indeed; for although we always want a full draught of reality we have often to put up with the small beer of abstraction for our stomachs' sake. These full draughts of reality take too long to digest.

There may be some comfort, therefore, in finding that universals are not abstractions at all, since the Abstraction Theory is utterly unable to account for them. According to this theory, we are supposed to pare away the distinctive peculiarities of things, and so to be left with their common elements. This elimination, however, to use Hegel's metaphor, is only peeling the coats off an onion; and such a process can never generate a universal from a particular. The effect of it is only to get less onion and in the end no onion at all. Elimination takes something away, and leaves the rest. There is nothing else for it to do. And even if elimination in this

sense sometimes seems to be possible, and sometimes seems to leave a common residue, it is abundantly evident that many universals have not the faintest semblance of being such a residue. It might be possible to arrive at redness by this process after eliminating the distinctive shades of red, but it would be interesting to know what colour is when the redness of the reds and the greenness of the greens have been abstracted from it. The residue might be a neutral grey, but neither redness nor greenness is a kind of grey. Again, the mutilated figure of a triangle which is neither right-angled, acute-angled or obtuse-angled, is plainly not triangular, and one would fain know what man is in the abstract when he is neither dusky nor fair, neither short nor tall, neither male nor female nor hermaphrodite, or how abstract man, thus denuded, could also contain all the males and females and hermaphrodites that ever were or will be. This theory begins by stripping a man of all that he possesses and then requires him to support the race.

There is no road this way, therefore, and so we must try the next. Universality, according to this second theory, is a function of certain particulars, *i.e.* of words and images and other signs. These words and images are particular in themselves. A word is just a noise and as particular as the boom of ordnance or the whistling of reeds. Its universality lies in its function, and this function is twofold. The particular things which have this function are labour-saving substitutes, and they lead the mind to the same terminus as the particulars for which they are substitutes. It saves me a great deal of trouble to know that a dog's dentition is so-and-so, for then I do not need to examine Tray's mouth or Fido's every time. And if I do not bring my eggs to market, the substitute signs in a letter about them may still find a purchaser.

Now it is clear that words and other signs certainly have this function, since they may be used as substitutes for things; and they save a great deal of trouble. On the other hand, it is equally clear that these signs save trouble precisely because they signify universals and because these universals *therefore* apply to their particular instances. Why is the sound 'redness' a substitute for the detailed examination of red things?

The sound, surely, is only the symbol for the quality and therefore not identical with it; and if we need not examine red things when we are sure of their redness the reason is simply that we know in advance that 'redness' *must* hold of all red things. If Stevenson's style resembles Sterne's, and if Gibbon's style does not resemble Kipling's, there really is resemblance or difference in these cases, and consequently the universals 'resemblance' and 'difference' apply directly. These statements use words, but they also express general facts because the words themselves have a general meaning. It is possible, to be sure, to attend to the signs only, and to practise the manipulation of symbols for its own sake. We do this when we work out examples in school arithmetic or in the differential calculus, for then we concentrate our attention upon certain counters and manipulate them according to the rules. Even in that case, however, the counters have a meaning if we choose to consider it, and when words are used to express general facts this meaning, usually, is clearly before the mind. It is simply absurd to say that words are identical with general facts. Some words express particular facts, and other words express general facts, and the difference, in both cases, can be seen in the facts themselves.

We may pass, then, to the third view according to which general facts are only the way in which existence organises itself. This contention may take very different forms, but its primary significance is clearly in terms of the mind, and this primary significance is far more important than any other. For it is clear that we organise our experience, and that, in a certain sense, we organise our world. Some enthusiastic realists, it is true, tell us that the laws of gasoline engines were just the same in the days of the ancient Athenians as they are now[1]. These laws, however, were certainly not contained in the organised experience of the ancient Athenians, and, in a way, had nothing whatever to do with the ancient world.

[1] Montague, *Studies in the History of Ideas*, p. 236. Quoted by J. R. Kantor, 'Instrumental Transformism and the Unrealities of Realism,' *Journ. of Philosophy, etc.*, vol. XVI. No. 17, pp. 452–453.

Indeed, if things were our thoughts about them, and if any man's world were just the group of ideas which he has come to learn and recognise, we might say very truly that what our logic (or our causal interpretation) does for us is simply to put our worlds into order. Principles undoubtedly regulate our thoughts, and, through our thoughts, our actions. A logical mind is one which organises its experiences in a logical way; a scientific mind arranges its observations in a quantitative, causal way; and so on. These statements, however, are surely incomplete, just because the problem is taken too narrowly when it is restricted to the mind's arrangement of its ideas. It is true that I organise my ideas when I think, but it is not true that this organisation is the whole of the matter. When, for example, I organise my ideas about the physical world, my endeavour is to discover the characteristics of the physical world itself. I have to arrange my ideas consecutively in order to appreciate the logic in the facts, but this arrangement is not itself the discovery to which it is a means. Logical thinking, indeed, is a habit of following the logical structure of things. This structure controls and determines the habit, and the habit, once formed, has a certain momentum in it. But that is a different matter.

Even the most uncompromising idealist (and his pragmatic brother) would admit the justice of this criticism, if nothing could be taken into account except the individual mind, on the one hand, and the world itself on the other. This theory would entrap me within myself for ever if my logic were only my private habit of organising; and no one wants to be a solipsist. By general admission, therefore, the theory must be stated more broadly. According to the Absolutists, the Experience which is organised is not really anyone's private experience, for private experience, as we call it, is only a part (and, in some ways, a spurious part) of Absolute Experience; and Cosmic Experience includes all private worlds as well as all finite selves. There is no opposition, therefore, between my ideas and the world; and even my private habits, as I call them, have a new significance when I realise what they truly are. These private habits are tiny wavelets in the current of the

universe, and this current itself is the sweep of principles which, like the Ideas of Plato, are always supposed to be dynamic and productive, although they act, of course, in the majestic timeless fashion of Absolute Reality itself. The pragmatists, to be sure, cannot go all the way with the absolutists, but they have gone to school with them, and most of them, by substituting the life-process, or the *Zeitgeist*, or the intelligence of a great people, for the Absolute contrive to retain some of the momentum of the Platonic Ideas and yet to dress the world in workmen's overalls, or to credit it with the overwhelming vitality of a gendering bull. Both sets of theories, however, presuppose that truth is a kind of construction and that thinking somehow produces the world. When this assumption is granted, principles may very well be the self-organisation of thinking and nothing else whatever; but the falsity of the assumption is apparent of itself, and that is a bad augury for the conclusion of the argument. This theory, indeed, is in conflict with itself. It maintains that all principles and all thinking is just a kind of constructiveness, and yet professes to *describe* the facts of Experience (with a capital E). This description, however, is also a piece of thinking, and so, on the theory, would have to be a fresh piece of constructiveness and nothing more. That is nonsense. If the Absolute or the *Zeitgeist* or creative life organises experience, this experience surely *is* organised and, if so, the recognition of the orderly result is surely different from the production of it. Even an organising principle has its own character, and this character cannot be another organising principle. It, at least, is simply found, and there is no room for this naked discovery in terms of the constructive theory itself.

The description of an orderly mental product, in a word, is logically *in pari materia* with any other piece of description, and so implies that general facts hold of particular ones in the same sense as they hold on any other theory. Nothing is gained by stating the problem in terms of mental organisation, and so we may leave the theory of dynamic impulses on one side. The important logical problem remains precisely where it was. The being of principles is guaranteed by the logic of any

theory that has faced the facts; and our original problem concerning the kind of being which principles have is still with us.

As we have seen, there seems to be a dualism between the mode of being which general facts have and the being of particular facts. For general facts merely subsist, and particular facts (unless they are the universal instances of universal principles) also exist. On the other hand, a dualism of these modes of existence is a difficult theory to sustain, since all particular existences logically require *some* general principles to hold of them.

Perhaps we may find some light in our perplexity if we consider the famous pact between universals and particulars according to which universals are *in re* and neither *ante rem* nor *post rem*[1].

Part of this contention is so manifestly true that it has only to be stated to be accepted. Particular things are determinately so-and-so; that is to say, they have universal characters; that is to say, universals are in them. Again, red things are not redness. The universal is *only* in its instances, if it is in them at all. It is not identical with them, and it is not identical with any part of them, since any portion of a particular thing is just as particular as the particular thing itself. All particular things, therefore, logically require universals; and we should avoid any taint of dualism if we could also show that all universals logically require particular instances which actually exist.

This supposed requirement seems certainly to be fulfilled in the case of some universals. What kind of being could redness have if nothing were red, or what could sweetness be if there were no toothsome things? What would baldness, or sententiousness, or sleepiness be if they were not found *in* the world? Any adjective, indeed, has a universal corresponding to it, and some adjectives seem to be utterly and intrinsically

[1] In the mediaeval controversy concerning the existence and potency of universals, the extreme realists like Bernard of Chartres or William of Champeaux held the *ante rem* theory, and nominalists like Roscellinus held the *post rem* theory in a most uncompromising form. *Universalia in re* is the mediating position. See Mercier, *Critériologie générale* (5th edition), pp. 328 *sqq*.

empirical. Universals of that kind, therefore, are surely *in* their particulars, and have no other conceivable mode of being.

Indeed, there seems to be only one limitation to this account of the status of universals like redness or sententiousness. Logic is satisfied if there are *some* existing instances of these universals; it cannot deduce all the particular instances which happen to exist. Külpe says, for example, that there are about 150 discriminable colours[1]. I do not know whether that is the right number, but I can be quite certain that the right number, whatever it may be, cannot be deduced from the universal 'colour.' Granting then that 'colour' logically requires to have some varieties in the world, it does not logically require to have any determinate number of varieties. The universal 'man' may logically require mankind, but this circumstance does not relieve the census officials.

This limitation is important, but there is a still more important point to notice. Even if the universal 'sententiousness' seems to be logically derived from existence, many universals do not. It seems perfectly clear, for example, that two and two would be equal to four if no couples existed in the world. Pure mathematics, to continue the argument, is logically independent of its application to existence, and so is the pure logic on which pure mathematics is based. For logical principles are *a priori*, and they apply to any thinkable being whether such a being could exist or not. Logic applies to all possible worlds as well as to the actual one, and if there are thinkable beings which could not exist in any possible world logic applies to these beings too.

It is true, of course, that *a priori* principles, like those of logic and number, do in fact apply to existence. All existing things have a logical structure. Eggs, again, can be counted. Therefore they have a number. Therefore they have all the characteristics and implications of numerable things. If pure geometry, as some maintain, can be completely arithmetised, its application to existence needs no argument. If not, its application to existence is not imperilled, for if the geometrical

[1] *Outlines of Psychology*, p. 127.

relation of betweenness, for example, is not a mere logical relation, it is extra-logical simply in so far as it is tinged with a meaning observed in empirical existence; and this may perhaps be inferred from the fact that the betweenness of right and left is logically identical with the betweenness of before and after, although these, most manifestly, are not the same. These facts, therefore, do not affect the argument. It is possible to maintain, it is true, that the general facts of number logically require *some* application to existence, although this application to existence is taken for granted throughout any demonstration in pure mathematics, and therefore does not enter into the demonstration itself. If this contention were sound it would meet the argument that two and two would plainly make four even if no couples and no quartettes existed; but it is impossible to see what grounds can be adduced in its favour; and it is clearly absurd to argue that pure logic or pure mathematics logically require existence just because they apply to existence.

We must conclude, therefore, that some general facts are logically independent of existence although existence itself cannot be independent of general facts. In other words the ultimate difference between existence and subsistence remains.

It must remain, I think; and yet there is an excuse, at least, for dallying with a very old conjecture. If subsistence cannot be shown to be only a species of existence, may not existence be only a species of subsistence? This contention has a long history behind it. Plato's account of the participation of the world of generation and corruption in the hierarchy of Forms is an illustration of it. It is assumed in Anselm's form of the Ontological Argument. It is seen in the Cartesian and Leibnizian theory that sensations are only confused reasoning, and music, for example, a piece of unconscious arithmetic. Kant, it is true, by insisting on the ineradicable difference between sensation and understanding, led philosophy on to another track, and razed the Ontological Argument to the ground. But Kant himself strove to find a common font for these two jets, and Hegel's Absolute Idealism claimed to have overcome

the dualism. In our own days Mr Holt's 'neutral monism[1]' has very obvious affinities to the older view.

Existence, to be sure, seems to differ *toto coelo* from mere logical subsistence. A hundred dollars are very different from the mere idea of the same. Living men are not merely the logical properties of vitality. We shed no tears over death in the abstract, unless we are worthless sentimentalists. Only existing things can do any work, and no other things can, properly speaking, be idle.

And yet it is possible to argue the question.

In the first place there is a well-known argument of Hume's. "To reflect on anything simply," he says, "and to reflect on it as existent are nothing different from each other[2]." And that, in a sense, is true. Existence, so to speak, *happens* to the things we contemplate. When we think of an angel and judge that an angel exists, the angel has the same characteristics in both cases. The only difference is that we judge that it exists in the second case and not in the first. This difference, however, is all-important. Indeed, it is so important that it refutes Hume's argument. Anyone can think of an angel stirring the waters, but not everyone is constrained to believe that a real angel really stirred them. The only way of constraining us to this belief would be to produce evidence that some trustworthy person had actually perceived the angel. In other words a special sort of evidence is required of all propositions which assert existence *in rerum natura*. Anyone can think of Gaunilo's perfect island[3], but no one would believe that the perfect island existed unless some one had seen it; and if any mariner brought the news of it, we should think ourselves bound to test his story by sending an expedition to the spot.

In the second place, it might be argued that existence is just

[1] In *The Concept of Consciousness*. [2] *Treatise*, bk I. pt II. sect. vi.

[3] Gaunilo, a monk contemporary with Anselm, disputed the Ontological Argument of Anselm's *Monologium* in his *Liber pro insipiente*. In terms of Anselm's reply, the 'insipiens' was unconvinced 'quia non magis consequitur hoc, quod dico, quo maius cogitari non possit, ex eo quia est in intellectu, esse et in re, quam perditam insulam certissime existere ex eo quia cum describitur verbis, audiens eam non ambigit in intellectu suo esse.' *Liber apologeticus contra Gaunilonem*.

the kind of subsistence which spatial and temporal things have. Existence is the asserted being of spatial and temporal things, as opposed to their contemplated being. When we make judgments about things which are also perceptible, our assertions claim to be true of existence. Otherwise, they should not.

This argument seems to be an *ignoratio elenchi*, because it is clearly no answer at all to the contention that existence is a different order of being from mere subsistence. The fact that perception (or introspection) is the only possible evidence for existence is common ground, and therefore does not tell in favour of this argument. Moreover, there is no contradiction in believing in the possibility of non-spatial and non-temporal existence, although we do not encounter such things in ordinary life. Orthodox theology, it is true, maintains that God is non-spatial and non-temporal, but these orthodox tenets may very well rest on a mistake. It is a mistake, for instance, to suppose that God's existence *must* be fleeting and perishable just because it is temporal; for God is not mocked if he endures while infinite time endureth. Again, it is a mistake to argue that changelessness is more noble than change, or that God, being changeless, is out of time. For change in itself is not a defect, and the unchanging is just as temporal as the changing. The everlasting hills are not less temporal than a poppy's petals. They only endure longer. And I cannot see that there is anything derogatory in spatial existence whether or not it is *totum in toto ac totum in qualibet parte*. But enough of this digression. We have no certain evidence for the existence of anything which is neither spatial nor temporal; and we have no right to deny the possibility of such existence.

We conclude, therefore, that there are general facts as well as particular ones; that these general facts may apply to existence, but that their validity is logically independent of existence; and that the subsistence of general facts cannot be reduced to any characteristics of existence, nor conversely. If this dualism seems lamentable, there is no way of avoiding it.

And there are compensations. The existent world, it is true, is a very wide parish, but even the immensities and the eternities are parochial in comparison with the discoveries of

the logical intellect. The freedom of thought is not a mean thing, and the wings of the logical intellect are clipped if logic is hampered by persistent appeals to sensory fact. Logic and pure mathematics are more certain than inferences based on sense, and they are not less worthy of being followed to a conclusion. There is a genuine basis in reality for the distinction between what used to be called the *vérités éternelles* and the *vérités de fait*, between the Forms and Becoming, between the relations of ideas and the relations of matter of fact. The new discoveries concerning infinity, or the analysis of arithmetic and its logical basis which Mr Russell, stimulated by the researches of Cantor, Peano and Frege[1], has forced upon philosophy's attention, are not retrograde steps, although they come nearer to Leibniz or Plato than to Hegel. On the contrary they bring, as Mr Russell claims, 'a sense of power and a hope of progress[2].'

It is highly important, too, that the status of general facts should be recognised to be what it is. Classical idealism in the grand manner of Hegel sought to correct empiricism by giving the understanding its due as well as the senses, and then found a home for both of them in the higher synthesis of Absolute Spirit. Now it is true that the first step in philosophy is frankly to see that the senses cannot be the basis of all knowledge, but it is a serious mistake to conclude that what is not sensory must be the work of the mind. That is only another fetter due to this arbitrary restriction of thought to mere existence. Principles, it was argued, must be mental because existence itself is either sensory or mental, and because principles, plainly, are not sensory. We must strike off this fetter too. General facts, as we have seen, are just as objective as the facts of existence although they do not exist. They confront the mind and reveal themselves to it. They are independent of our thinking and they are literally discoverable

[1] Mr Russell, who always makes a point of explaining his indebtedness to other authors, explains that he himself arrived independently at Frege's definition of number. See *e.g.* his *Introduction to Mathematical Philosophy*, p. 11.

[2] *The External World*, p. 30.

as they are in themselves. For that reason they do not need a higher immediacy. They are not aimless migrations of wandering adjectives but ascertainable facts and relationships. And we should accept them as we find them.

That is one side of the story. The other side shows that there is insight as well as prudence in rendering unto Caesar the things that are Caesar's. The general truths which depend upon sensory observation are only probable conjectures although they require *a priori* principles. Scientific induction is not strict demonstration; and the point is fundamental.

Even granting that causal interpretations have a basis in perception, it is plain that our inferences to particular causal laws are neither certain nor demonstrable. In an inductive proof we argue that *any* A must be a B because all observed A's have been B's. As it stands, this inference is a fallacy. The most we can infer is that such a connection is likely. And induction by means of the hypothetical method is also fallacious on the face of it. We are never in a position to prove that any given hypothesis is the only possible one, and therefore we commit the formal fallacy of affirming the consequent in all such inductions.

Obviously, therefore, we must conclude that inductive conclusions are matters of probability at the best. Probability, however, is a branch of logic. It is the logic of relevant but inconclusive evidence, and its axioms and assumptions are *a priori*. It follows therefore that induction requires *a priori* principles, and it is plainly not completely *a priori* since the evidence for it is also, in part, the observation of certain particular instances. But there is a further difference still, since, as Mr Broad has shown recently[1], there is no known principle of mere probability which justifies our belief in scientific inductions. For a full proof of this conclusion I must refer the reader to Mr Broad's article, but I can sketch some of the main points here.

If I infer that the atomic weight of nickel is 58·68 the quantity of nickel that has been weighed is wholly insignificant in comparison with the quantity of nickel in the universe.

[1] *Mind*, N.S. vol. XXVII, No. 108, pp. 389 *sqq.*

Now the probability in this case is measured by the fraction $\frac{m+1}{n+1}$ where m is the number of observed cases and n the number of cases in the universe. This probability, therefore, is too slight to be worth believing. It is true that the probability of the *next* case of nickel having the atomic weight 58·68 is $\frac{m+1}{m+2}$, but this formula will not help us very much. In the first place we always infer the general law, and not merely the probability of the next case; and in the second place the formula for the next case is far too feeble for the inference we want to make. If an inexperienced student with a poor balance found the weight to be 61·23 four times running, then the odds would be five to one that the weight in the next case would also be 61·23. Such a principle, therefore, is not sufficient for our purposes. No one would put his trust in induction unless he supposed that he had obtained enough relevant evidence to justify assertions about *the* atomic weight of nickel.

Induction, in a word, is worthless without certain special assumptions about nature itself. We always suppose, in fact, that the weight of nickel is constant when no one is weighing it, and that fair samples of the element can be obtained so that the experimental results in a few instances are evidence for any instance. We assume, in other words, that there are parallel cases, and that we can recognise the species of things if we take the trouble to examine them carefully. Without these assumptions induction would not yield any likelihood worth considering, and with them it is only probable; for we all admit that the increase in the number of instances makes the evidence better, and our admission would be meaningless if the conclusion stood to demonstration.

This difference in the character of inductive evidence as compared with pure logic, is interesting in many regards, and it is particularly important in view of certain metaphysical theories. The ideal of all rationalism is to show that every feature of the realm of being can be shown to be a consequence of a few comparatively simple principles, and we may conclude

this chapter by considering, very briefly, whether this ideal is well founded.

As we have seen, the *a priori* laws of logic, number and the like, cannot be the principle of the empirical connectedness of existence, although they hold of all existence. We have to observe nature in order to discover her laws, and we have to argue from these observations inductively and at our peril. On the other hand, it is at least possible that nature behaves in conformity with a comparatively small number of relatively simple principles, and that these may be discovered. We saw in an earlier chapter that the continuity and connectedness of nature is given to the mind in perception in a fragmentary but not in a negligible fashion. The inductive assumptions that there are parallel cases and that fair sampling is possible are extensions of this perceived meaning—too sweeping, indeed, to be indisputable consequences from it, but, on the whole, legitimate and even moderate. Is it not possible, then, to include the interpretation of perceived meanings together with the foundations of inductive inference concerning nature in some general Law of Analogy or Principle of Sufficient Reason? Even if this principle is not wholly certain, it is supported by very many facts and contradicted by none. And it is, perhaps, the metaphysical ground of that law of parsimony to which, as many consider, all sound thinking conforms.

The Law of Parsimony—the *Frustra fit per plura quod fieri potest per pauciora* of Occam's razor—is manifestly just and highly important. In logic it means that 'analysis is to be carried as far as possible[1]'; in physical science it means that 'as hypothesis increases necessity diminishes[2].' Again it is a principle of elegance. The fewer the assumptions the neater the proof. It is an appeal for economy, too, and sumptuary edicts have excellent intentions, although luxury is a hard thing to define and an impossible thing to curb. On the other hand the limitations of a finite intellect compel us to be sparing in our assumptions if we hope to understand anything of importance; the power of the intellect is simply its grasp of a

[1] P. E. B. Jourdain, *The Monist*, vol. xxix. No. 3, p. 451.
[2] Whitehead, *The Organisation of Thought*, p. 176.

multitude of details in a single principle, and no intellect can grasp very many principles in this thorough fashion. Those who count knowledge precious may therefore be expected to believe that nature responds to a principle of this kind. *Natura horret superfluum.* The structure of reality is simple and so our thinking should be simple too.

This final step seems more seductive than solid. True, we cannot understand things unless we can bring them under a comparatively simple principle, and we are bound to believe that there are principles, and that explanations can be given in terms of them. It does not follow, however, that the principles which are most important for our understanding of things are also most important in the order of nature, still less that nature as a whole is peculiarly adapted to our limitations. If maxim can be met with maxim, we might follow Kant by opposing *Entium varietates non temere sunt minuendae* to Occam's razor[1]. The complexity of the universe is always with us and we have no right to set bounds to it. We may hazard the guess that logic cannot be less fundamental in the world than in those selected portions of reality which we are capable of apprehending; and we should not go further than that.

[1] In the Appendix to the *Transcendental Dialectic*.

CHAPTER VII

VALUES

The world that earth-born man,
By evil undismay'd,
Out of the breath of God
Hath for his heaven made.
Where all his dreams soe'er
Of holy things and fair
In splendour are upgrown,
Which through the toilsome years
Martyrs and faithful seers
And poets with holy tears
Of hope have sown.

ROBERT BRIDGES.

THE value of things, I think, does not raise any special problems in the theory of knowledge. Value is a quality which things may have or may not have, and it can be recognised by the mind like any other quality. On the other hand, the problems of value are important and distinctive enough to repay separate discussion. According to many philosophers, value and existence are somehow one, and this principle, if it were true, would plainly have most important metaphysical consequences. Again, even apart from the perplexities of that majestic theme, there are many humbler difficulties in the conception of value, and some of these difficulties, if they were insurmountable, would have very important results; for they would show either that there is no such thing as value, or else that values cannot be known. And if knowledge is impotent concerning all questions of worth there might perhaps be neither use nor worth in considering it.

The orthodox tradition in philosophy classifies values into truth, beauty and goodness, and then sets about to establish a legislative and executive union of logic, aesthetics and ethics. This procedure, I think, is mistaken. It omits certain important values from the list (happiness, for example), and it includes truth which is not, properly speaking, a value at all.

True knowledge is a value, and perhaps the highest of all values, but truth itself means only that the facts are so, and it is hard to see how that can fortify anyone's soul. There may be value and importance in *knowing* that Popocatepetl is higher than Shooter's Hill, but this true proposition itself is only a state of affairs.

It is otherwise with beauty and goodness, for these are valuable in themselves, whether or not anyone appreciates the fact. The justice of Aristides was independent of the suffrages of the Athenians, and if the man was just he was therefore worthy. In the same way, beauty need not wait upon the fashion. A romantic revival may be needed to reveal the stateliness of gothic cathedrals or the serene splendour of Alpine summits, but this beauty, and the worth of it, belonged to the Alps and the sanctuaries all the time.

These statements, I am well aware, require a defence, and I hope to give one (with certain reservations concerning beauty). The most formidable lion in my path is the common and most pertinacious attempt to prove the subjectivity of all values. Aesthetics gives the strongest case for this argument, but the subjectivists also attempt to annex the whole province of morals. We must therefore consider these topics in their order.

Mr Saintsbury, defending Castelvetro's doctrine that delight is the sole end of poetry, writes as follows:—"That Burns administers, and has a right to administer, one delight to one class of mind, Shelley another to another: that Béranger is not to be denied the wine of poetry because his vintage is not the vintage of Hugo: that Longfellow, and Cowper, and George Herbert are not to be sneered at because their delight is the delight of cheering but not of intoxication: that Keble is not intrinsically the less a poet because he is not Beddoes, or Charles Wesley because he is not Charles Baudelaire—or *vice versa* in all the cases—these are propositions which not every critic—which perhaps not very many critics—will admit even in the abstract, and which in practice almost every critic falsifies and renounces at some time or other[1]."

[1] *History of Criticism*, vol. II. p. 87.

The reason for this inconsistency among the doctors is not far to seek. Common sense and the King's English renounce subjectivism, and so the critics are bound to contradict themselves verbally unless they are intolerably prolix, and are certain to contradict themselves really whenever they relapse into common ways of thinking through the weakness of their critical flesh. And there may be another reason. Perhaps the critics cannot keep faithfully to their own standards, because these standards are false, and because the truth of the opposite catches them unawares whenever they try to state their position fully. Be that as it may, there is a strong personal obstacle, at all events, in the way of complete subjectivism among the critics. If they were consistent subjectivists, none of them could be right and none of them could be wrong. This consequence would be fatal to their pretensions; and perhaps their pretensions, in this instance, are better than their creed.

Delight, I take it, is simply a feeling, and feelings are neither right nor wrong. It is illogical, therefore, to dispute about tastes, if tastes are only feelings; and those critics who follow the subjectivist theory have only the right to say that they like Baudelaire or Mrs Aphra Behn with some special and peculiar relish; and either that they are not alone in their taste or that they are proud to be alone. The critics, to be sure, may explain the way in which this or that offends them, and point out what they like best, just as Meredith complained of smug Victorianism in the *Idylls of the King*, or as Francis Jeffrey drove about Edinburgh declaring there had been 'nothing as good as Nell since Cordelia[1].' Delight in detail, however, does not differ in principle from delight in the whole, and there is as much logic in Stevenson's blunt dislike of M. Anatole France as in Meredith's contrast between the 'gentleman Boccaccio' and the 'Sir Pandarus public' which liked 'the Euphuist's tongue, the Exquisite's leg, the Curate's moral sentiments, the British matron and her daughter's purity of tone' in *The Holy Grail*[2]. It is all one to delight in

[1] On the authority of Forster's *Life of Dickens*, vol. I. p. 226.

[2] *The Letters of George Meredith*, vol. I. pp. 197–198.

a jewel five words long and to delight in a quarto from frontispiece to colophon. The only difference is that the latter delight needs more space. Anthologies may give delight like the flowers in a crystal vase, but the flowers are as sweet in the garden, and they are better in the field. Excellence should not be rent into patches. The author has to struggle for the *mot rayonnant*, but his travail should be the reader's ease.

Very few of the great critics, I fancy, hold that delight is mere liking without any qualitative differences in it. Mr Saintsbury plainly does not; and, indeed, he adds an aggrieved and petulant footnote to the statement quoted above. "It is perhaps well," he says, "to meet a possible though surely not probable objection. 'Do you deny *ranks* in poetry?' Certainly not, but only the propriety of *excluding* ranks which do not seem, to the censor, of the highest[1]." Mr Saintsbury's view is that there are different kinds of delight, and different ranks in it, and our problem is whether his theory is sufficient, and what is the logic of it. Meanwhile we must certainly admit that there are, in fact, different kinds of delight. From the aesthetic point of view pushpin is *not* as good as poetry when the quantity of pleasure is equal; and Yvetot is not as good as Constantinople. The delight in one of Vermeeren's paintings is not the delight in Bach, and the gourmet's delight in plovers' eggs is not comparable to our delight in a Della Robbia. Each of the arts, indeed, has its appropriate delight, and each division within each art. The delight in Theocritus differs from the delight in Lucretius, and the delight in Donne is other than the delight in Heine. Indeed, there is no good reason for stopping at this point. There are many strings in Erato's lyre, and each has its appropriate charm. Melpomene has many masks, and each mask has its own delight. The greatest poets give the greatest range of delights, and critics excel when they respond to them all.

These facts, however, do not prove that beauty is only a feeling of delight; and that is the subjectivist's case. Let us ask, therefore, whether he can support his position by argument.

[1] *History of Criticism*, vol. II. p. 87 n.

It is commonly argued that beauty is plainly a thing of the mind and therefore subjective. The reply to this argument is that the fact is doubtful and the inference false.

There is beauty, I take it, in sky and cloud and sea, in lilies and in sunsets, in the glow of bracken in autumn and in the enticing greenness of a leafy spring. Nature, indeed, is infinitely beautiful, and she seems to wear her beauty as she wears colour or sound. Why then should her beauty belong to us rather than to her? And why should the beauty of art need a different explanation? A melody can be heard, and temples, paintings, and statues can surely be seen. If everything we perceive is mental, then beauty, of course, is mental too. But where is the necessity otherwise? Literary art, it is true, may seem of a different order, but this appearance may be a deceit after all. The cadence of words is just a kind of music, and the magnificence of numbers can be heard. It is idle to argue that this cadence and this magnificence are the vestures of thoughts and that thoughts are mental; for thoughts, to be sure, are mental, but literature does not present us with thoughts. It presents us with things that we think about. Anyone, I think, who takes the trouble to consider what precisely is before his mind when he reads a page of *Tom Sawyer* or of Blake's *Songs of Experience* finds the problem very puzzling. Images are blended with words, and these in their turn with present questionings. But whatever the pattern of the fact may be, fact of some kind is certainly before the mind. The printed page is a turnstile which clicks us into things. We are confronted with fact when we read, and this fact is not our thoughts about it.

It is difficult to see, therefore, why so many philosophers and critics hesitate to ascribe beauty to things in the same sense as they ascribe colour or shape, but even the most determined realists incline towards compromise at this point and admit that the status of the 'tertiary qualities' is somewhat dubious. Probably they are swayed by several considerations, but we may consider two at this stage of our argument. The first is the intimate connection between beauty and delight, and the second is the extent to which personal meanings

and personal associations are involved in the appreciation of beauty.

The first consideration is not convincing. Feeling is always blended with our thinking. A man has his feelings even when he thinks of the multiplication table, but that does not prove that the multiplication table is part of his mind. Certainly, it is far easier to distinguish the feeling from the multiplication table than to distinguish the delight in poetry from the beauty of it. That is no proof of identity, however; and in certain palpable instances the judgment of beauty seems to differ very notably from any feeling of pleasure. Indifferent art is not always unpalatable. There are many who prefer *Mr Standfast* to *Colonel Jack*, although they know perfectly well that *Colonel Jack* is far the better. If pleasure were the sole criterion, this discrimination would be out of the question, and it is difficult to see how the discrimination can be due to a qualitatively different feeling of delight in the two cases; for both Defoe's story and Mr Buchan's are just vigorous pieces of narrative. Indeed, the fact seems to be, quite plainly, that we judge Defoe's work to be the better, but that we may find more interest in *Mr Standfast* for the time being.

The second circumstance is equally unconvincing. True, the beauty of literature, for example, is permeated with associations. Without these, wit and simile, irony and allusion would be utterly wasted, and these things are the attic salt of good prose and of good verse. Pathos and anti-climax, again, or the *sermo pedester* in place of *superbia carminorum*, *constructionis elatio* and *excellentia vocabulorum*, offend us precisely because of the discord which their inevitable associates bring. In the same way, the expressiveness of chiselled stone or shining canvas is impersonal only in the sense that it is catholic. The eye of the beholder must bring experience with it in order to appreciate the charm and the meaning of these things. It is impossible, however, to extract a convincing argument from this circumstance. All our perception has an acquired meaning, and even the allusiveness of literature is not on a different plane from the meaning of perception or judgment. It is subtler, more recondite, more palpably acquired, but the essence of it is the same.

It would be most illogical to argue that nothing can be objective if it is acquired and not primitive, but even this argument is not open to the subjectivists. For by what right do they deny that a sense of beauty really is primitive? The noble savage, it is true, is so often a stupid fiction that it is useless to speculate about him, and the zeal of missionaries to discover whether there are savages without a code of morals or a belief in unterrestrial potentates, has left us very sparse data for guessing how far the untutored races appreciate the beauties of nature. On the other hand, art is nearly as old as man. It is a very long time since the first cave was rudely adorned, since barbaric taste thrilled with the joy of glittering things, since song and dance appealed to men, and since sagas were told over crepuscular embers. We may safely conjecture, then, that the sun-god was seen in his beauty as soon as he was seen at all, and that Neanderthal man had something of the artist in him when he rejoiced in the spring. Men have fancied that molluscs sing praises to God. It is easier to fancy that they respond to beauty. Peter Bell is not the only type of peasant, and yellow primroses are only yellow to many who are not peasants. Have we not heard, indeed, of a great philosopher who likened the stars to a rash?

Let us pass, then, to the most familiar argument on this topic. Beauty, we are told, must be subjective because it varies from man to man. Fire burns here and in Persia, but the standards of good taste vary with time and climate and training. There is a pleasant tale of certain anthropologists who visited the Malay Archipelago, and took records of the native music. They found a sort of rhythm in the head-drummer's measures, but no music; and they rejoiced when an understudy took his place, for then they heard something like music. The natives thought otherwise, however, and were as disappointed as a music-hall audience when a popular comedian falls sick. Who can arbitrate, then, between the taste of the anthropologists and the taste of the natives? And the same thing holds universally. The precious ones who cannot admire Raphael differ from the great public, but which of them is right? And if anyone prefers Landseer to Cézanne why must

he be wrong? There are different fashions in these affairs, and what else is there?

These contrasts, I think, are more striking than just. There are great differences, to be sure, between the age of Solomon and the age of Queen Anne in all matters of sensibility, and between Constantine's taste and the demon-trappings of some patron of ju-ju. Such contrasts, however, need not be about the same things. Perception depends so much upon what we have learned to look for, that it is not surprising if primitive taste differs from civilised. A savage does not perceive the same thing as a modern European, and if the pair could pass an eye round, like the Graiae, each might perceive the same beauty. Again, the contrast is not so absolute as it seems. The Indian's beads and wampum have a certain beauty; and we can understand his delight and even share it if we choose. Beauty need not be denied just because it does not seem the best, and if the golden splendour of Solomon's temple with its palm-trees and cherubim and open flowers was too ostentatious, and the brazen pillars of his house with their chapiters of brass and their two hundred pomegranates were too sumptuous for modern taste, the temple and the palace were magnificent all the same, and would have seemed so to anyone. Indeed, it is very easy to exaggerate this clash in the standards of beauty. The return to old standards is as patent a fact as the alternation of new ones. Greek beauty has been the perpetual privilege of all beholders, though sometimes a Winckelmann was needed to point it out. Great art has a catholic and an abiding appeal.

This argument, to be sure, is easily overstated, but there is enough of truth in it to show that the clash of standards is not the whole truth. This clash of standards, moreover, only proves that judgments of beauty are often wrong, and that it is difficult to be certain when any of them is right. True, the difference between maintaining that there is beauty although no one can ever know when he has found it, and that there is no such thing as beauty, is so slender that it is not worth quarrelling over; but the difference is crucial if (as seems to be the fact) taste is not wholly wayward, if its development

is intelligible, if its early stages are not superseded utterly, and if the great epochs of beauty in art can almost always be appreciated by later ages, although each age must be doubtful of its own art until time has taken its measure.

Beauty, in fact, is something that is judged, not something that is merely felt. None of the arguments of the subjectivists is able to impugn this fact, and our judgments of beauty are either right or wrong simply because judgment itself must be either true or false. Indeed, the doctrine of ranks in beauty already admits this conclusion by implication. The comparative must have the same logic as the positive. Whatever is placed in a higher rank must be placed there because it really is better; and if it is better it must either be good or bad in itself.

At the same time it is possible to argue that nothing is beautiful save our delight itself, and that we call things beautiful just because they cause beautiful delights. Our judgments of beauty, on this view, would refer to our feelings, and not to things. Our delights really are valuable, some delights are really better than others; and that is the sum of the matter. We must consider this theory, therefore, for something more than completeness' sake.

Is it true in fact that there is no beauty in comeliness or majesty save only the feeling of delight? It is plain, of course, that we do not usually say this even if we mean it, for we say that Fiesole, or Leonardo's *Last Supper* or Beethoven's *Ninth Symphony* is beautiful without further ado. Language, however, has a short way of dealing with intricate matters, and its crude methods should not, perhaps, affect our conclusions. The problem is not about what we say but about what, on reflection, we really mean.

The most extreme contention on the opposite side would be that the *Ninth Symphony* would be beautiful if no one had ever heard it, and that the frozen seas would still glisten with loveliness after all life has departed from the earth. This view, I think, is not nonsense, and it is, of course, extremely simple, but most philosophers recoil from it for better reasons than mere repugnance. This contention, they think, plainly

goes beyond the evidence; for beauty, in our experience, is never appreciated without delight, and therefore it is illegitimate to argue that beauty would still be beauty in the absence of any possible delight. The fact of inseparability, to be sure, would not prove very much in itself, for many things are inseparable which are plainly distinct, but when the companionship, as in this instance, is peculiarly close and peculiarly relevant the inseparability may mean a great deal. The fact is not simply that we find charm wherever we find beauty, just as we find scales wherever we find fish. It is easy enough to distinguish between the fish and their scales, but the union between beauty and delight seems to be as close as the union between a man's enjoyment and the fruition of his wishes.

On the other hand the delight in beauty is a very complex thing, and it is far richer than mere feeling. If the sense of beauty must be suffused with delight, this delight, in its turn, presupposes a very subtle harmony of the mind as a whole. The delight needs vision and insight and understanding. It is not merely superadded to these, but it blends with them; and they in turn blend with it. Words like 'charm' or 'delight,' to be brief, signify, not mere feeling, but an intricate sentiment of the soul in which feeling, however predominant, does not extinguish all else. If our minds are charged with feeling whenever we appreciate beautiful things, our feelings are also enlightened by our knowledge of the significance of these things. Beautiful things, therefore, are much more than occasions of beautiful feelings, and if beauty is not a predicate of non-mental things *simpliciter*, it cannot hold of anything less than the whole complex 'thing-that-is-felt-with-delight.' A perceiving and comprehending delight is no mere feeling.

We may conclude, then, that delight enters into the recognition of all beauty, but that beauty is not merely delight, even if we have no right to maintain that things can be beautiful apart from a mind. They might be, but we cannot tell. On the other hand, things may certainly be beautiful when they bring delight, and the beauty (and there-

fore the value) of these delightful things is a predicate of them just as certainly as their lustre is a predicate of my lady's diamonds.

The subjectivists can unmask the same batteries against moral standards as against aesthetic ones. Shaftesbury, for example, spoke of a taste or relish for virtue[1], although he recoiled from any determined logical pursuit of his own theory. Most people who do not make a business of reflecting on these matters are content to believe that conscience is only a feeling, and that wicked imaginings ought to be destroyed simply because they are felt to be defiling. For conscience is an oracle, and oracles love the twilight. Again, the variations of ethical standards are as striking as the variations in the fashions of beauty. Those puberty rites that seem so foul to us are the first obligation in Central Australia. We have no moral copybooks for the ethics of a strike, and war convulses the duties of the moral world as thoroughly as any cataclysm convulses the face of nature. Indeed, nothing is easier than the dialectic of naturalism which sets about to prove that any commandment in morals is a mere convention like the rule of the road, and that the abiding thing in conduct is just life and its instincts. 'Thou shalt not steal'—but what is robbery? If a man's ancestors have been allowed to keep a piece of land, why should the community pay tribute for it? And what is wrong in promiscuity of ownership except custom, convenience and strong prejudice? What are the rights and wrongs of polygamy, and where is the pretence of international morality when there is no international police? The whole thing is an affair of sentiment and convenience (is it not?), and moral standards, like all religions in Gibbon's epigram, are equally true in the eyes of the populace, equally useful in the eyes of the magistrate, and equally false in the eyes of the philosopher. Hunger and lust, ambition and comradeship, love of ease and joy of battle are the only enduring forces in a human polity.

Even if these arguments were sound, however, they would not prove their conclusion unless they could explain the fact

[1] 'An Inquiry concerning Virtue, or Merit,' *Characteristicks*, vol. II.

of moral obligation; and they cannot do that. Moral obligation is neither habit nor fear, neither custom nor obedience, neither fashion nor deference, and it is not the obscure feeling of these. For what do we mean when we say that we *ought* to do certain things, and *ought not* to do certain other things? Clearly we do not mean that we are forced to do the one and forced not to do the other. Our zeal for righteousness may perhaps constrain us but nothing else need; and righteousness itself includes obligation. Neither the enactments of our rulers with their sanctions in the police court, nor the commands of God with the carnal and spiritual penalties which the lawyerly minds of priests have devised, are moral obligation itself. And obligation is neither custom nor habit. There are customary obligations, it is true; and just men, I suppose, have formed the habit of walking uprightly; but there are obligations to non-conformity too, and these are felt and acted on. The Hobbists among our moralists, therefore, have reached a most desperate pass. They have to maintain, by hook or by crook, that obligation is really the constraint of fear although it does not seem so to us. Obligation, they say, is an obscure sort of fear, which we take for an ultimate principle, and it would vanish if we knew our own emotions thoroughly. A theory which leads to such a morass as this should be avoided at all costs, and yet Hobbes's attempt to base obligation on fear[1], was better argued and more plausible in itself than most of the modern attempts to base it on tribal ritual or a nation's habits.

What, then, is obligation?

It is tempting to suppose that obligation is an ultimate of ultimates, an autonomous imperative of which it is enough to say that he who cannot discern it of itself need not borrow a lantern elsewhere. Moral obligations, in a word, like

[1] *Leviathan*, pt II. chap. XVII.: "The Lawes of Nature...of themselves, without the terrour of some Power, to cause them to be observed, are contrary to our naturall Passions....And Covenants, without the Sword, are but Words, and of no strength to secure a man at all. Therefore, notwithstanding the Lawes of Nature...if there be no Power erected...every man will, and may lawfully rely on his own strength and art, for caution against all other men."

Luther's *Ich kann nicht anders*, or the modern Englishman's and the ancient Persian's[1] pride in keeping his word, plainly are imperatives which take precedence over all else. On the other hand, there are reasons for any imperative, granting that moral obligation is rightfully lord over the will. The good does not wait upon the ought, and the ought is enlightened by the good. For the will always seeks an end, and it is contrary to all sound reasoning to suppose that the imperative justifies the end. On the contrary, the end justifies the imperative. The reason for obligation, then, lies in the value of the end. It is always legitimate to ask why anyone ought to do this or that, and always sufficient to answer (if we can) that he ought to do it because it is the best thing to do.

The analysis of obligation, therefore, shows, on the one hand, that obligation cannot be resolved into a mere feeling or sentiment, and, on the other hand, that there are reasons for obligation based upon judgments of value. Morality stands or falls, therefore, with the validity of judgments of value; and if these are not true, the grounds of right action cease to hold. We have already considered most of these indictments in principle, but the subject is so important that it is better to consider them again from the point of view of moral theory.

Those who resolve a judgment of beauty into a species of appreciative feeling commonly maintain that moral judgments are also a kind of appreciative feeling. Virtue pleases us in a certain way, and vice displeases us in its appropriate emotional fashion. Inequality or injustice offends us sometimes and arouses our resentment. At other times it pleases us, for our sympathies may be with the princes, or the plutocrats, or the other superiors which God or our own indolence have set above us. This analysis, however, palpably fails to describe what we mean by injustice or any other moral evil. We know very well that A has no moral right to prefer himself to B unless A's value is really greater than B's, and we know that the justice or injustice of princes is not an affair

[1] Cf. Herodotus, *History*, I, 138.

of sympathy or resentment. Indeed, those who take this line of argument speedily give the case away by the modifications which they are compelled to make. Sympathy, they admit, is not moral in itself. What is moral is sympathy with a 'flavour of generality[1].' Resentment is not moral; it has to be the resentment of Adam Smith's 'impartial spectator'; it has to be watered with sympathy and enlightened knowledge. These are desperate expedients, for they are intended to explain why moral judgments claim to be binding on all and to hold irrespective of persons, although sympathy and resentment make no such claims.

What these theories really do is to give an analysis of moral feelings which is as nearly accurate as may be, granting the false assumptions that there are no moral judgments and that moral judgments have no connection with moral feelings. These moral sentiments certainly exist and we should be grateful to Hutcheson, Hume and Westermarck for their psychological analyses of them; but they are not the whole of moral theory. Conscience is not merely the abhorrence of foul deeds, although foul deeds are abhorrent; and the head condemns Heliogabalus or Alexander Borgia, granting that the heart loathes them too. These sentiments, indeed, like any other sentiments, are allied to judgments, and, what is more, are allied to judgments of value as well as to judgments of fact. Righteous anger, for example, is enlightened by, and derived from, the discovery of unrighteousness. Sentiments are never blind, and reason is neither quite cold nor quite aloof, although all the subjectivists in morals from Hume[2] to Mr Bertrand Russell[3] have supposed so. These writers

[1] Westermarck, *The Origin and Development of the Moral Ideas*, vol. I. pp. 104 *sqq*.

[2] *Treatise*, bk II. pt III. sect. iii.: "Reason alone can never be a motive to any action of the will," "Reason is and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them"; and the whole section.

[3] *Principles of Social Reconstruction*, p. 12: "Only passion can control passion, and only a contrary impulse or desire can check impulse. Reason, as it is preached by traditional moralists, is too negative, too little living, to make a good life....All human activity springs from two sources: impulse and desire."

maintain that morality must be an affair of feeling or impulse just because moral ideas stir our emotions and lead to action. They admit, to be sure, that the head plays some part in action however cold it may be, for knowledge of the means to an end clearly guides our actions, and blind feelings are as useless in practical affairs as they are in a boxing-bout; but they arbitrarily assume, none the less, that knowledge of the values of the ends of action is impotent and aloof. Why? The only possible proof of this contention would be a demonstration that there is no such knowledge; and this proof has never been given.

We may pass, then, to other arguments. If beauty is sometimes supposed to be subjective because of its close connection with personality, one would suppose that this argument holds *a fortiori* of morals. For persons are the bearers of morality, and so far as we know, the only bearers of it. God and the angels are moral beings if, and only if, they are persons; and theologians, recognising the difference between God's personality and ours, feel bound to hold that God is good *per alium modum eminentiorem*[1]. Again, if animals have rights (as most of us believe in a way) they must also have duties, but moral obligations among the animals are so primitive and so rudimentary that they are rightly excluded from serious consideration in ethical theories.

Persons, then (together with their character, actions, and capacities), are the final subjects of moral obligation, and, as all Kantians know, the subjects of this law are also the lawgivers. These lawgivers, indeed, must not only be conscious but must have foresight, choice of alternatives, some knowledge of means, some knowledge of values and some recognition of the independent worth of other subjects in the kingdom of ends. These requisites are very stringent and they exclude most of the animals and all of the plants, to say nothing of ions and engines. Those, indeed, who maintain

[1] *Summa Contra Gent.*, lib. I. caput xxx.: "Quia enim omnem perfectionem creaturae est in Deo invenire, sed per alium modum eminentiorem quaecumque nomina absolute perfectionem absque defectu designant, de Deo praedicantur et aliis rebus: sicut est bonitas, sapientia," etc.

that there are no morals without *Sittlichkeit* deny morality to anyone who is not a member of a relatively organised human community, but they go beyond their record. A man's duties in the concrete, to be sure, are so intimately connected with the rights and aspirations of his fellows that there is no sphere of private existence which the community does not touch; and even the most austere anchorite is no exception to this truth. But the community is not a moral being. It is a community of moral beings, and a man owes duties to himself irrespective of the rest of society. Robinson Crusoe did not have to wait for man Friday's coming in order to have duties, and a man's morals are not entirely submerged in his social station.

There is nothing subjective in this view, despite Hegel. The thesis of the *Phenomenology*[1] and its successors is that gifts and capacities are not valuable in themselves because they may be either good or bad, that their value lies in the rational organisation of them, that the state is just this rational organisation, and so that the bearer of value cannot be anything less than the state. It is an odd thing, perhaps, that a theory which persistently contrasts the unity of the cosmos with the imperfections of the sciences should be so ready to find Reason writ large in politics. Reason must be strong indeed to shine through the muddle and the meannesses, the intrigues, rancour and pretence of political history; and the philosophers of Hegel's school shut their eyes so often to the facts of history, and so often descry Utopias by faith alone, that their thesis has to be accepted blindly before it can be followed wittingly. But enough of that. Gifts and capacities have a value just because they are either good or bad. These values imply a world of claims and counter claims, and the claims are worth meeting just because they are genuine. Although the conflict of values may be pernicious, the settlement of them is worthless unless there are values to settle. Values, in a word, are not subjective. They really pertain to individual characters and capacities and do not merely seem to do so. A man's capacities belong to him; his needs require his neighbours; and this objectivity is so thoroughgoing that

[1] Professor Baillie's translation, vol. I. pp. 369 *sqq.* and especially p. 373.

it constrains some and dismays others, that it wrecks lives as well as makes them. Even if truth were unknown and impotent, it might still be objective; but the values of morals and of conscience are known and felt.

The strongest arguments for the subjectivity of moral judgments are varieties of the plea that moral judgments are so much expediency and opportunism, capricious, wavering and temporary. It is held that some moral rules are plainly arbitrary, and therefore that all may be: that some moral rules are things of fashion or social status and therefore that all may be: that moral rules are nothing unless they are universally binding, whereas it is admitted that every commandment has its exceptions.

The first argument need not detain us long. There is nothing sacrosanct about many rules of conduct; but even if every particular rule were arbitrary, it would not follow that it is arbitrary to have any rules at all. Even the rule of the road is not arbitrary in this sense, for the road would be worthless if there were no rules. The laws of property, again, as we find them in any given community, may not have a very secure basis in ethics. A family may own estates because the ancestors of its second cousin's great-uncle helped a weak sovereign to despoil an arrogant bishop. Even if all the legal titles to property were worthless, however, no society could continue without rules for its security in possessing the goods required for food, production, and comfort. Moralists, indeed, usually try to prove too much. If they were content to prove that there must be some rules of property or some rules for the relations of the sexes, it would be impossible to gainsay them. Instead of that they often argue as if there were no alternative between chaos and primogeniture, or between Christian wedlock and promiscuous sexual intercourse. It should not be necessary to point the moral. Rules of property and rules of wedlock are justified, *pro tanto*, if they work. These affairs must be regulated to prevent utter disorder. And we know from experience that disorder is barbarous, wretched and vile, even if a starving remnant of redeeming virtues flourishes sporadically in it.

The second argument can summon innumerable examples, but it is enough to refer to a few modern instances. Why should uprightness be less of a virtue in the press than on the bench, why should it be pardonable to cheat the revenue or to steal from a hotel, why should blacklegs be judged so variously, and why should a fallen woman be treated so differently from a male libertine? Some flimsy reasons may be given in these cases, it is true, just as reasons may be given to prove that duelling was once a duty and is now a crime, that debts of honour should be met before tradesmen's bills, or that lynching is not really the thing that it is. But these reasons are mere excuses. Nothing is more precious than honour; and nothing, it would seem, more wayward.

Evidence of this kind, however, is far too slender to justify the sweeping conclusion that there is neither reason nor truth in morals. It would be a strange thing, indeed, if moral rules were *less* capricious than they are; for duty is just as complicated as life. If we could be reasonably certain that a few moral rules are generally binding, that is the most that could be expected even of a society that reflected seriously on its duty. And there never was such a society. Intuition takes the place of reflection with nine men out of ten, and the moral reflections which abound in our novels, our pulpit and our press, are only scattered suggestions summoned by a few notable perplexities. When a man's standards of honour depend as much as they do upon hearsay evidence and the expectations of his friends, when conditions change so much that circumstances perpetually alter cases, when the ends of action vary so nicely with the conditions of living, it would be strange indeed if anyone could be sure of more than a very few moral rules.

But can we be certain of any? Are any moral rules universally binding? One wonders what is meant by this question. It is true, perhaps, that any code of rules like the ten commandments conflict here and there, and that there is always the chance of a hundredth case which contradicts one of the rules flatly. I admit I cannot think of a case in which wanton cruelty or sexual perversion is a plain duty; but perhaps

there are such cases. Again it may be true that very general rules like Sidgwick's Axiom of Benevolence, or Kant's injunction to treat humanity always as an end, or the 'golden rule' of our childhood, are either too abstract to apply determinately to any particular case or else are faulty in some respects. The principle that my neighbour's welfare ought to count as well as mine never tells me by itself how to treat my neighbour; I may have to treat engine-drivers as mere means for my purposes: and the golden rule is false unless I do unto others as they *ought* to do unto me, and even then would fail signally if there were relevant differences between us. But to grant all this leaves the main question untouched.

Every rule of conduct must be justified by the values it subserves. When persons and circumstances differ as much as they do, therefore, it is not at all remarkable that a course of action that would be the best for most people under most circumstances should not be the best for all people under all circumstances. The rule *ought* to differ in its applications if there are relevant differences between its instances; and what is generally right may sometimes lead to disaster. The logical thing to do is to rejoice that so many rules hold in nearly all cases, for this enables us to follow the rule with as little risk as may be, and generally to dispense with the pains of hard thinking. What is more, it puts the *onus probandi* on any one who holds that the rule does not apply in such and such a case. But if the rule can ever be proved to be inapplicable (as when the rule against suicide is absurd if the fortress must fall and the women in it have something worse than death to expect at the hands of their conquerors) then the rule ought not to be followed in these cases for precisely the type of reason which determines that it ought to be followed in other cases. Suicide is a wanton destruction of values and therefore wrong; but if life must certainly be worse than death, then suicide is a duty.

This circumstance, therefore, so far from proving moral judgments invalid, may prove precisely the contrary. That treachery is generally unjustified and promises generally binding is as firm a rule as anyone ought to wish for; and

there is no laxity in maintaining that reasons can be shown for exceptions in war or in civil commotion. It would be an accident if any rule were always binding so that we could always 'damn the consequences' and never needed to consider the case on its merits. This accident may sometimes happen, and one would be interested to meet a case of justifiable ingratitude, or praiseworthy lust, or admirable malice. The argument, however, does not stand or fall because of the certainty of rules without any possible exceptions, and it is better to leave it so.

Summing up this long discussion, we may say that human actions, human character and human dispositions have value or worth. They are good or bad in a moral sense, and value or its opposite belongs to them in the same sense as redness belongs to a cherry. For similar reasons, the values of beauty or its opposite belong to certain things in certain connections just as objectively as any other qualities. And the reasons which seek to prove the contrary are not well founded.

This result may seem to be very disappointing, for value is the crux of most of the larger issues concerning the relation of the human spirit to the world, and if philosophical enquiry shows only that some things are valuable, some opposed to value, and others indifferent, what grounds have we for hope in our destiny or for reverence in the order of existence? Religion seeks a metaphysical basis for the conservation of values; and beauty or happiness or true knowledge or moral worth indicate, though they are not identical with, a certain harmony between man and his environment. If the physical order as a whole is indifferent to values, bringing tornados as well as zephyrs, and earthquakes as well as sunshine, values seem to be but fortunate accidents with little promise of stability and no secure basis in the constitution of things.

Our argument, to be sure, has not attempted to prove that the values which we can discern empirically are the only values there are, but it has given no hint of the kind of premiss which is sought by those who wish to establish a larger union between values and existence. A survey of the empirical facts seems to show conclusively that value and existence are not

the same, since many things are neither good nor bad; and it finds no excuse for denying or mitigating the facts of suffering or ugliness or sin. Again, it is impossible to prove from empirical data by themselves that the universe has a bias towards the good, that the human spirit is all but certain to have ample opportunities in the world, or that there is always a balance of good over evil. If these things are true, the reason, it would seem, must be extrinsic to the character of existence and of value as we find them. The world, perhaps, is the work of a Creator whose aim is the good of his creatures or his own glory; and the stubbornness of our environment may really be our school and our opportunity. This extrinsic connection, however, is not enough for most idealists, and idealism appeals to many of us precisely because of its faith in the reality of ideals. It takes its stand upon the superior might of ideals in comparison with fact. The ideal, we are told, is reality itself, and what we call fact is only the tarnished surface of the ideal deceiving the foolish and rewarding the wise. The universe is transfigured good because it is transfigured mind; and without some premiss of this kind we are yet in our sins.

According to Dr Bosanquet[1] and those who think with him, the thesis of the idealists depends on the unassailable premises that there is no individuality short of complete existence, and that the harmonious organisation of existence is just what we mean by value. Anyone, we are told, who has fully realised that existence is one and individual, therefore knows that all is well with the world; and he may even entertain a certain chastened optimism concerning human life. Our private interests, it is true, and our temporal and contingent aspirations must expect a short shrift and a perfunctory hearing. Finite personality is not a serious matter for this transfigured good. Length of days, the reverence for human beings in a kingdom of ends, the love of one man for another and the joy of the lark in its freedom are only the fruits of finitude, and so are without true being. If Absolutism gives us hope, therefore, it gives little hope for those personal ties and temporal goods

[1] *The Principle of Individuality and Value.*

which most men hold so dear. It is enough for us if values exist, and absurd to ask who has them. Indeed it is kinder to pluck the eye of finitude out than to let finitude pervert a philosophy. Even the removal of suffering, the unmasking of hypocrisy, the suppression of infamy, crime and pollution, are in a way, less urgent duties according to this philosophy than according to most others, for if all is well with the world then the poisonous stench of iniquity and the unspeakable horrors of lust and plague and war are not ultimately evil, and so are either too superficial for genuine philosophy or else are necessary elements in the dramatic fitness of things. 'Pity would be no more if we did not make somebody poor, and mercy no more would be if all were as happy as we.' On the other hand, this optimism which is only another name for the necessary perfection of the universe, has an impersonal and timeless splendour of its own. For the sum of being is enough for any man, and our finitude is a sorry thing to yearn after when we participate in the whole.

The temper of realism is the reverse of this. Realists need not deny, it is true, that the universe as a whole is a sublime unity sempiternally perfect, but realism does not imply this conclusion, and it does imply the full reality of good and evil as we find them. For the realists, Borgia was a villain and Francis a saint. What is more, Borgia's wickedness was Borgia's affair, and not the work of the universe. The qualities of the whole need not be the qualities of the parts; and many of the parts may be very bad indeed even if the whole is good. Realists, therefore, may logically accept the facts which they find without referring to the whole which they do not know; and when they fight against real abuses, they are not compelled to enquire into the perfection of reality as a whole.

It is difficult, no doubt, to avoid prejudice in these matters. Very few philosophies stand in the way of anything a man has a mind to do, and there is nothing to prevent an absolutist or a mystic or any other metaphysical idealist from becoming a crusader against sin and suffering and crime. Even if wickedness is an illusion, that in itself is not a command to refrain from meddling with it. Its half-being may disturb the half-

being which we call life, and there is nothing illogical in setting our own half-being against it. Indeed, it is possible that philosophers could devise a theory according to which time, although an illusion, is less of an illusion in its illusory early stages than in its later ones, and thence infer that the universe has summoned us to be instruments of progress, and has enabled us to guess at the nature of the progress from the character of the impulse to improve. This inference from idealistic premises is not more illogical than quietism or indifference, but it is not less illogical; and there can be little doubt that any theory which impugns the reality of time or sin or suffering lessens the importance of removing evil. If nothing but the whole matters 'in the end,' any finite enterprise and any human crusade is thereby belittled. It can only ameliorate finite conditions; and there is a great difference between theories which maintain that finite abuses and finite remedies are real, and those which maintain the contrary.

"But you go too fast," I think I hear. Even if the penalty of believing that 'the ideal only is actual' were a certain carelessness concerning the apparent rottenness of apparent institutions, a certain acquiescence in the established order of things, and a certain tardiness and conservatism in the application of remedies, does not idealism contain a stimulus to progress which realism must wholly lack? Struggle is pathetic without the conviction of victory, and how is this conviction possible without the knowledge that the universe itself is on the side of righteousness? Idealism encourages hope just because it gives a reason for this conviction, and the realistic temper has no such prop to sustain it. When the actual is taken to be finally true, nature is taken to be indifferent to values, and man, waging a precarious and unequal struggle on the crust of the earth, has no prospect before him save the temporary alleviation of a few evils. He cannot cope with the greatest of all evils, for that is just the purposelessness of human existence itself, and the littleness of mere humanity.

Is it really so? To begin a struggle without hope is indeed a pitiful thing, but is it pitiful for man to struggle even if

he cannot count on the succour of the universe? If human life can be made worth living, is not that worth striving for? If wrong can be worsted, is not that worth doing? Is duty nothing because it is only a man's duty, and suffering nothing because it is only human suffering? On the contrary, if these things are trivial, human existence itself must be trivial. If it is, why should the universe trouble to help us? It might surely find something better to do. And if human existence is not trivial, where is the worthlessness of the struggle? Throw a man on his own resources and he may do something worth while. Make a pensioner of him and he will repay your alms with feeble dependence.

CHAPTER VIII

THE MIND

These postulata being admitted, it will follow in due course of reasoning that those beings, which the world calls improperly suits of clothes, are in reality the most refined species of animals; or, to proceed higher, that they are rational creatures or men. For, is it not manifest that they live, and move and talk, and perform all other offices of human life? are not beauty, and wit, and mien, and breeding their inseparable properties? in short, we see nothing but them, hear nothing but them.

SWIFT, *A Tale of a Tub.*

IT is time to pass from the objects of knowledge to the process of knowing and to the mind itself. When things confront the mind, the mind has to accept them, and realists should be able to explain what they take this knowledge to be

Realists are committed to a doctrine of logical pluralism. They maintain that there is nothing in the nature of knowledge to prevent any given judgment from being wholly and finally true, irrespective of the conditions of existence and of the truth of other judgments, however closely the judgment may be connected with these in fact. And realists accept a kindred theory of perception, for they hold that physical things may be revealed to the perceiving mind as they really and truly are in their own proper character.

Many things, that is to say, can be known *by us*. The knowledge and observation which realists set out to defend is human knowledge and human observation, not the celestial apprehending of some impersonal cosmic intelligence. Realists, it is true, should not deny knowledge of some sort to the ape and the python on the one hand, or to the angels in heaven on the other, but their principal concern is man's mind as they find it.

Our knowledge is a temporal affair happening in commonplace life-histories, passing rapidly from one thing to another, overcome by a drowsy nod, a whiff of ether or a gust of

passion. At the same time it is acquired continuously, it is fostered by education and experience, and it is not quite unsystematic or quite capricious. Realists, therefore, have to defend the reality of a mind which grows and then grows old, which learns and forgets, which struggles, and studies, and takes its ease. Thus far they are committed by their theory of knowledge; but they are not committed further; and so they may differ from one another very sharply indeed, in their views of the mind in detail. Any psychology, indeed, which does not implicitly or of set purpose deny that Smith or Jones may know this or that finally and without qualification is consistent with realism.

On the other hand, realism would be only a torso without some philosophy of the mind, and so I intend to pass to this question without further preamble. To be brief, my thesis is that we must look to psychology if we wish to know what the mind is, and that there are no sound metaphysical principles which prove that psychological results must be merely provisional. No psychologist or philosopher pretends, of course, that he has obtained complete insight into the mind and its workings, but no sane enquirer makes this pretence in any of the sciences. It is enough in any science if we can know part of the truth and if we are justified in believing that the methods and principles which have already obtained this partial success are also the remedy for our present ignorance.

If this thesis were not denied so frequently, and sometimes so bitterly, there would be excellent reasons for supposing it an innocuous truism, cautious to a fault. In reality, however, there is no such thing as caution in these matters. For it is meaningless to defend psychology without explaining *what* psychology is defended; and psychologists are so radically and so acrimoniously divided upon the meaning, the scope and the methods of their science that any one who explains his position in detail has to face the certainty of disagreeing with most of them.

Psychology, we may suppose, seeks to obtain a certain body of knowledge, and such knowledge is about the mind. This inevitable supposition, however, is dangerous enough to ruffle

the waters of itself. For what is the mind, and how can we know what it is? If psychologists were agreed in their general opinions on these matters, they might cheerfully leave the answer to the detailed results of psychological investigation. In fact, however, they are not at all agreed upon these fundamental questions, either before they begin their enquiries or after they have finished them; and so it is idle to expect that psychological problems will solve themselves by patient psychologising. Too many false starts are possible, and there is not even a consensus of opinion among the experts to guide us in determining which of these starts are the false ones.

It has always been recognised that human beings are mind-bodies, or (if the reader prefers) body-minds, and again that the empirical study of the mind trenches upon the metaphysics of the soul. At the present time, however, the trend of speculation has profoundly altered the perspective of psychology. It is not merely that souls have gone out of fashion. Psychologists, rightly or wrongly, seldom took souls very seriously. What has gone out of fashion is traditional psychology itself. The doctrine of evolution has conquered biology so thoroughly that biologists can afford to be critical of it. Psychologists, on the other hand, write as if they were thrilled with the novelty of the notion, and as if they were bound to accept it with the faith of a little child. Armed with this confidence they seize the flail of evolution, demolish the cobwebs of theology, stifle philosophy in the filmy ruins and then, with the lust for destruction hot within them, turn and belabour consciousness itself. The mind of a man may seem very wonderful but, look you, it has the pedigree of the ape. And a man's ancestry is the stuff of him. The continuity of the germ-plasm has seen to that. Therefore man is the ape's brother under his skin, just as Judy O'Grady is sister to the colonel's lady. Our simian ancestors, it is true, have unfortunately perished (I think we developed too fast for the truth of these theories) and so we should look to the gorilla and the chimpanzee, or better still, simplify our theory by declaring that the most prominent characteristics in the higher animals are also most fundamental in mankind. The higher

animals are dominated by instinct. Therefore man is also a bundle of instincts. And when this stage of the argument is reached it seems a pity to stop. Animal intelligence is a risky thing to think about, for animals are not introspective and do not communicate with us. Let us therefore renounce introspection, and then we shall know where we are in psychology. Instincts, again, are conscious processes and consequently elude the biologist and his methods. Let us therefore deny the existence of consciousness and study behaviour instead. When we track behaviour behind the reflexes down to the simplest conceivable response, we shall then, at long last, turn our backs upon superstition and discover what the mind really is. Thus all will be *ad maiorem naturae gloriam*.

Those of us who believe that Newton did a little thinking before he wrote his *Principia*, and that his protoplasmic ancestry was incapable of anything of the sort, are not likely to be impressed by these rhapsodies. If we were pressed for an argument, we might reply that continuity of development, interpreted in this preposterous sense, cuts both ways. If Newton cannot be more than his pedigree, his pedigree must be at least as good as Newton. That being so, it is not at all unscientific to take the mind of man as we find it. The question is, What do we find?

In our own persons, at all events, we find consciousness; and if our theories deny consciousness to other people, so much the worse for our theories. What then is this consciousness?

The only possible answer to this question, it is plain, is just a description of fact. Colour is proved to exist when it is pointed out, and not otherwise. And so with consciousness. We are aware of our own consciousness, and we can usually detect the signs of consciousness in others. When a man, as we say, regains consciousness after chloroform, he feels, perceives and attends where he could not do so before. The evidence in these cases, it is true, is sometimes deceptive. The 'ether cry' has been heard in cats whose cerebral hemispheres have been removed, and these pitifully mutilated creatures have been known to show an anger-mimesis though never the

pleasure-mimesis of purring[1]. This occasional uncertainty, however, proves nothing. It is impossible to prove that no Englishman enjoys roast beef just because we cannot always be certain whether our guests like their dinner or not.

It seems clear, however, that something more than bare feeling is needed if consciousness can be said to exist in the usual sense. Etymology, indeed, is a perilous guide, and so it may be irrelevant to point out that the word's history implies a certain togetherness of experiencing in *con*sciousness. On the other hand, consciousness, in ordinary usage, implies a certain organisation of experiencing and at least a hint of memory. The total absence of memory from moment to moment in cases of *petit mal* inclines us to deny consciousness altogether; and the twilight sleep under scopolamine is doubtfully conscious precisely because the patient's retentiveness is so remarkably fugitive.

On the other hand, it is easy to exaggerate the minimum of togetherness which consciousness involves. The unity of consciousness, it is true, has been a favourite theme with philosophers. Kant's account of the unity of apperception, for example, is a pre-requisite of the possibility of scientific experience. At a humbler level, again, it is fair to point out that there cannot be disappointment unless the disappointed person is also the person whose hopes have been frustrated, and that there cannot be inference unless one and the same mind is aware of the premises and draws the conclusion. Unity of this kind, however, is far closer than the minimum required for consciousness to exist. A dog's consciousness, or a child's, and sometimes a man's, is much more loosely united than this. True, there is some togetherness of experiencing in any consciousness, and a *mens momentanea* is not a mind at all; but there need not be very much togetherness.

There is still less justification for the view that consciousness implies self-consciousness, or that this togetherness of experiencing must not only exist, but must also be known to exist, ere consciousness occurs. The primary function of

[1] Sherrington, *The Integrative Action of the Nervous System*, pp. 254–255.

consciousness is to refer beyond itself, and for the most part consciousness fulfils this function without any *arrière pensée* towards the self. No one, therefore, has a right to deny consciousness to an animal or to an infant simply because they are probably not self-conscious except in a most rudimentary fashion. Deliberate self-cognition, again, requires a special effort which is seldom made; and very little can be inferred from the circumstance that a man who attends to other things can attend to himself if he chooses, and that he is, for the most part, inattentively self-conscious.

Many philosophers, it is true, are at pains to point out that consciousness tends to disappear altogether when intense interest fills the sails or utter concentration takes the helm. Self-forgetfulness, they say, is the law of crisis, of spiritual awakening, of deeds of valour in mettlesome emergencies, of love and joy and supreme skill. The wrestler *is* his tottering opponent, the hunter *is* the trigger of his Winchester. This argument, however, is beside the point; for what is absent in these cases is not consciousness but self-cognition. Archimedes was not unconscious when the soldier killed him, but he was so intent on geometry and so inattentive to himself that he was as defenceless as a penguin. Absent-mindedness of this notable kind is only the mind's absence from practical concerns. It is not the absence of consciousness; and there is nothing miraculous in the fact that the mind, in moments of crisis, is often too busy to attend to itself.

Another argument is sometimes added to this one. According to it, we know from experience that attention (and even consciousness) tend to cease when the need for them has gone. The tyro at the pianoforte has to attend to each movement and to each note. The finished pianist attends to the score, and his fingers, as it were, act of themselves. This argument certainly shows that consciousness, regarded as the guide to action, is not always indispensable. We breathe too well to need consciousness, and consciousness is often a hindrance when we have it. Consciousness comes on the scene when our breathing is disturbed; and even then it is more of a nuisance than a help, like an old maid weeping when someone is hurt.

But although this argument may disprove the usefulness of consciousness in certain contingencies, it has no further bearing on the issue, and it has very little bearing even on the connection between consciousness and self-consciousness. The tyro need not be self-conscious though he may be. He learns the better if he is not; and if he is self-conscious when he is skilful enough to dispense with consciousness, his self-consciousness need not do any harm although it may sometimes disturb the routine of action in its perverse attempt to probe into the action's machinery.

Although these arguments are designed to belittle consciousness, they admit, at any rate, that we know what consciousness is; and anyone who denies this is beyond the pale of argument. On the other hand, it is plausible to urge that our knowledge of consciousness carries us but a little way. Our experiences, we are told, are a motley crew of contingent, evanescent, superficial events. Consciousness is only the iridescent surface of bodily life, and the best way of studying the mind is to leave consciousness alone. In the last analysis, indeed, consciousness is only a kind of response which a living body makes when it has reached a certain level of integration, and the real business of psychology is to study the nervous system.

The general outline of the argument which is deduced from these considerations is now so familiar that it can be indicated very briefly. The study of the human organism shows, in the first place, that it is a selective instrument. The eye is attuned to light, the ear to sound. In the second place, this selection from the environment is only the beginning of a process, not the consummation of it. *Stimuli* are selected, and every stimulus issues in movement. The schematic outline of this process is expressed by the conception of a simple reflex. Such a reflex is the conduction of a stimulus through a chain of neurons, passing through the central system and issuing in movement. What we find in experience, however, is an integration of compound reflexes. We are the creatures of reflex patterns, and the root conception of the whole enquiry is the alliance of certain reflexes, the inhibition of others, and, most important of all, the regulation of alternating reflexes in time.

Reflexes reinforce one another when a succession of weak stimuli in the same region, or a number of stimuli from different organs, debouch simultaneously on a final common path and lead to a single strong thrust. This implies, of course, that there is inhibition of antagonistic reflexes. If all the reflexes were stimulated together we should have the strenuous impotence of tetanus or strychnine poisoning. Most reflex patterns, however, are alternating. Food is first chewed, then swallowed, Walking is the alternating contraction of the flexor and the extensor muscles. And so on. Coordination in time, therefore, is the fundamental requirement for the integration of reflexes, and this, we may suppose, is the distinctive office of the central nervous system[1].

This theory explains much more than consciousness. The movements of developed animals are integrated through the nerves and the central nervous system, and this ample kingdom includes unconscious reflexes like breathing, and subconsciousness at all its levels, as well as our intermittent consciousness. It would be highly illogical, however, to infer on this account that consciousness is an otiose affair. Even if the same kind of work, broadly speaking, could be done without consciousness as with it, it would be very unlikely, in terms of the argument, that the *special* work of consciousness could be done quite so well, or quite in the same way, if consciousness were absent. Reflexes may be integrated through the spine or the bulb, but the hemispheres, we are bound to suppose, are better than the spine or the bulb for certain kinds of response; and if consciousness, as the argument indicates, is the highest level of this integrating process, we must conclude that it is better for certain necessary purposes than any infra-conscious integration.

The argument, indeed, is usually developed along these lines. Sometimes, it is true, the consciousness accompanying a reflex seems merely to register an occurrence in our bodies. The sneeze goes off, and we feel it going off, and that is all. Even in this case, however, consciousness is not really inert, for we can delay the sneeze if we try; and in the general case consciousness does not seem to be merely a spectator of an

[1] The outlines of this account follow Sherrington, *op. cit.*

organic disturbance. It seems to play its part in the process, and the evidence suggests that it really does so. When we distinguish between conscious and unconscious response, the chief differences seem to be the presence of pain and pleasure, of the one part, and an extension of the range of response, of the other part. The biological utility of pain and pleasure has been noticed so frequently that it is needless to dwell upon it here. Pain is the signal of utter need, sometimes mischievous, but salutary on the whole. And the extension of the range of response which we find in conscious reactions is even more striking. The skeletal muscles (which are the voluntary ones) are specially connected with the senses which have the longest range, and all the evidence shows that consciousness is a prevenient thing, anticipating movement, and permitting more delicate adjustment[1]. When the peril is near, it is true, there is no time for consciousness. The eye, unless it is a baby's eye, closes quicker than the branch that meets it, and we marvel at our cleverness (if we are wise) *après coup*. But when there is time we need all the wits we have. The cat stalks the mouse and crouches before it springs.

If this statement of the case confined itself to the primary biological function of consciousness, there would be no occasion to dispute it. The dispute begins with the magisterial announcement that the primary biological function of consciousness is all that consciousness is; and this announcement is a mere *non sequitur*. To say that consciousness helps the nervous system and that, in certain selected cases, it does the same kind of work as the nervous system might do without it, is not even the beginning of a proof that consciousness is only a species of nervous process. It is highly important, for example, to show that there is a certain continuity between lifeless and living things, but such arguments can never prove that life itself is not an *emergent*, radically novel in comparison with its antecedents, although requiring these and using them for its own ends. Similarly there is nothing against believing, and a great deal in favour of believing, that consciousness is an emergent, and not simply a modification of antecedent

[1] Cf. Sherrington, *op. cit.* especially Lecture IX.

nervous processes. If so, a certain continuity of function with the nervous system and a certain solidarity with it is not to the point, for that may be admitted without touching the argument; and it would even be permissible to argue that consciousness, beginning as humble menial, gradually became the governor and even the tyrant of man's life. The thing has been known to happen.

The statement of this possibility, it is true, is not a proof of its truth, and there are plenty of modish arguments which try to show that the encroachments of consciousness are either negligible or non-existent. Man, we are told, is a bundle of instincts and the consciousness of instinct is buried in the nervous system. Instincts are more subconscious than conscious; and it does not matter in principle which they are.

The discussion of this theory in detail would need a long argument. Here it must suffice to say that if an instinct be defined in the usual way as a racial habit, relatively little educable, and serviceable, on the whole, after very little experience on the part of individuals, then man is the least instinctive of animals. Human beings acquire most of their habits, and it is foolish to argue that 'direct action,' or the habit of drawing cheques, or the movements of armies, are strictly comparable to a moorhen's instinct for diving, or to the weary journey of Fabre's caterpillars[1] when the thread they had spun had been made a closed circle instead of a trail to lead them homewards. Of course it is easy to exaggerate the fixity of instinctive routine, on the one hand, and the reflectiveness and initiative of human behaviour, on the other; but human behaviour, whether in society or in the cloister, is reflective, adaptive and opportunist to an extent which no other species of animals can match. Those who deplore the herd-like irrationalism of the masses cannot have listened to working men discussing their own proper business, and they ignore the extraordinary adaptiveness of modern society. Ten years ago, no one would have predicted that the British working man would show a business-like respect for ration-

[1] For a short account see the Essay in Fabre's *The Wonders of Instinct*, English translation.

cards, but when ration-cards were needed the very children in the streets clung to them with the tenacity of limpets. When Florence Nightingale tried to induce the soldiers in the Crimea to save some of their pay, Lord Panmure said bluntly that the British soldier was not a remitting animal. The British soldier became a remitting animal as soon as he saw the need for it.

These considerations cannot be discounted by exploiting biological arguments. Certainly it takes a very cool philosopher not to see the necessity that a man must live, but arguments concerning the biological utility of consciousness, however important they are, cannot be conclusive of themselves. Civilised man must be cunning enough to avoid motor cars and runaway horses, and in that respect he is on a par with the animals; but he lives the better if he has his children vaccinated and his house disinfected, if he pays policemen to protect him, and sees to it that those who bring him his food in ships are commanded by expert navigators. There is more biological utility in the discovery of salvarsan or chloroform, in the sextant, and in the town's water-supply, than in all the instincts of fear and flight and protective mimicry put together. Granting that life must be preserved and fostered, intelligence at the helm is worth a whole cargo of instinct. If these perversely narrow biological theories were right, the lion and the tiger would rule the world, and man, bereft of fire and ships, of clothes and gunpowder, would cling forlornly to some tree-top, cursing the loss of his tail, and gibbering morosely at the dryness of the nuts within his reach.

The moral of these arguments is that any psychology worth the name must take knowledge very seriously indeed. Man, to be sure, is a psycho-physical being sprung from lowly origins, and there should be no dispute concerning the importance of his muscular apparatus or of his nervous system. On the other hand, we must frankly recognise his intelligence as we find it, either in the subtle theorising of Laplace or in the humbler workings of a skilled artisan's mind. Even if a theory of consciousness could be devised which accounted for perception and instinct with reasonable completeness, this theory would be only the beginning of psychology and not the end of it.

Every theory of the type we are now considering tries to explain what consciousness is by describing what it does; and so it is important to point out that even a complete account of the functions and of the effects of consciousness would be a very poor substitute for a description of consciousness itself. Even if our consciousness always did the same kind of work as the nervous system it would not therefore *be* the nervous system; and even if it were the eye wherewith the universe beholds itself there would still be a question concerning the kind of eye which the cosmos selected for this purpose. Both the naturalistic and the idealistic theories of consciousness, however, fail to notice this important point, and their failure is worth examining.

The naturalists, as we have seen, start from the nervous system and maintain that consciousness is just the central part of a delicate neural adjustment comprehensively organised. What is more, they hold that consciousness makes precisely the same selection as the body does. Its material, they say, is just what the sense organs select, and consciousness, so far from being distinctive and peculiar, is simply a certain selection from things and a certain arrangement of them. Consciousness has no peculiar stuff in it, and the same things may be either conscious or not. Bells are associated with books and candles. That is one of their relationships. They also agitate the surrounding atmosphere when they are struck by a clapper. That is another relationship which they commonly have, and the truth is that out of the infinite variety of relationships which bells have, one set or pattern is called physical and another is called psychical. The same bell appears in both the patterns. To say that there is consciousness is to say that a thing is selected and organised in a certain way; and that is the whole mystery.

A more ancient and more magnificent theory of the same type states that the function of the mind is to be a microcosm of the universe. The mind is a chameleon of the cosmos perpetually mirroring the totality of things in its subtle, tiny translucence. It is needless to cite authorities in support of this conception since it is, on the whole, the orthodox opinion of the

classical tradition in philosophy, but I cannot resist the temptation of quoting from an author who is but little read since I do not see how the point could be better put. In his *Synthetica*, the late Professor Laurie explained that he took the universe to be a whole of things "which find their truth *in the last term of a continuous and unbroken system*; that is to say, as presented to conscious subject which makes its appearance in the evolution of the world-organism, for the mere purpose (so to speak) of gathering up the universal record into itself as that record is *therein* written; man himself being the concluding chapter of that record—the individual into whom the whole is poured[1]." "Colour," he said again, "demands *me* for its own purposes. Colour and I are fellow creatures in the same related system, helping each other's full reality out[2]." And once more: "If I might indulge in rhetoric I would even say: The natural world of flowers and stars might be regarded as waiting patiently for the emergence in the system of a conscious entity that they might fully realise themselves. The said consciousness, however, *adds* nothing to what they truly are, save the awareness in feeling of what they *truly* are. And you might even imagine a dim thrill of joy in the star-world when a conscious subject first beheld them in their reality, and again when Copernicus and Newton revealed their ordered motions. The stars then sing together. Any other view is, to my mind, crude dualism[3]."

The objection to these theories is that they deal only with a part of the problem. Granting that consciousness is the means which the universe has chosen for self-revelation (it is common to choose one's biographers oddly), we have still to consider precisely what this chosen means is, since the universe, for aught we know to the contrary, might have selected very different means. It is very important, to be sure, to try to see consciousness in its true perspective, and therefore to show its relations to its bodily conditions on the one hand, and to the putative needs of the universe on the other. But that is an account of the setting of consciousness, not of its character,

[1] *Synthetica*, vol. I. p. 79. [2] *Ibid.* p. 92. [3] *Ibid.* p. 119.

and the only way of discovering this character is just to observe consciousness itself.

Such observation is introspection, and common sense is fully convinced of the feasibility and reliability of that process. The plain man knows from his own experience what pleasure or sorrow or excitement feels like. Indeed, he knows these experiences infinitely better than he knows his brain or the needs of the universe. He has only a hearsay knowledge of grey matter or the Fissures of Sylvius, and he does not dare to guess at the needs of the universe; but he knows directly in his own person what joy or pity or desire is. Introspection, to be sure, is not infallible. There is no pontifical *magisterium* about it, and it is easy, I daresay, to set it too many riddles, and to base *ex cathedra* encyclicals upon it which have no better warrant than inclination or theory. These admissions however do not affect the issue as the plain man understands it. The character of his consciousness, he thinks, is not hid from him; for he can observe it introspectively.

This point is disputed, however, and, clearly, one of the most pertinent objections to it is the theory that consciousness is not really a distinctive, peculiar thing. Those who maintain this view challenge the plain man's interpretation of introspection, and hold that the facts which his introspection reveals can be studied better in another way.

We have already seen the main outlines of this theory, and now we may consider it more narrowly. Up to a point it is eminently successful, since it criticises most effectively the natural, reverend and most mistaken doctrine which asserts that consciousness consists of an inner world of mental images and sensations mirroring the outer world of things. Berkeley, it is true, exploded this fallacy long ago; but superstitions linger, and the inverted Berkeleianism of the American 'new realists' is at least a most interesting experiment in exorcism.

As we have seen in earlier chapters, the principal objects of our consciousness are things perceived, remembered, or imaged, together with principles and universals; and the analysis of the American new realists is fully in accord with our conclusions concerning most of these objects. The things we

perceive may also be remembered, expected or imaged, and we have seen reasons for believing that precisely the same things may be studied in the science of physics. Different men, it is true, make different selections from perceived reality, and the same men make different selections from things according as they perceive, remember, or image them. It does not follow, however, that perceived things or imaged ones belong to an inner mental world. We may grant, then, that if consciousness were a name for the 'inner' world, and if the 'inner' world consisted of sense-data, images and the like, then, in all probability, this 'inner' world would be only a selection from the stuff which, otherwise selected, is the 'outer' or physical world. This theory, it is true, might have greater difficulties in explaining the status of universals and of general facts, but it would be sufficient for the others. Sense data are not timeless or colourless or unextended; they do not have a peculiar non-physical temporality or spaciousness or colour; and if introspection were the observation of sense data and images, it might, indeed, perform a useful office but it would not differ in kind from the observation of physical things. Its results, therefore, might be attained more simply and more fruitfully in some other way.

It is a great thing to have avoided this confusion between 'inner' and 'outer,' and yet it is not enough, for these perceived and imaged things which confront our consciousness are not themselves consciousness at all. When I see a blue sky on a winter's day and notice sadly how different the trees are from their budding greenness in spring, the blue is not conscious of the green, or the green of the blue, and the principle of difference is not conscious of either. It is I who am conscious, I who apprehend the green and the blue and the difference. My consciousness is not a character of the things I observe or think or imagine, and it is very doubtful whether it is ever written on the faces of the things I know. My consciousness is my awareness or apprehension of these things, together with the feelings and strivings which accompany my apprehension. Nothing, surely, can be plainer than this, and yet stress must be laid upon it because it is neglected in so many theories of knowledge.

We may say with Dr Strong that these theories of the American realists neglect the fact of givenness[1]. When a thing is given to the mind it does not therefore acquire a new and peculiar mode of being; but things may exist without being given, and it is useless to argue about the given without admitting the ultimate fact of givenness. Or, again, we may say that it is one thing for an object to exist and quite another thing for that object to appear. When a thing appears, it need not appear otherwise than it is; but it cannot *appear* unless there is awareness of it, and it can *exist* without that. When it appears, moreover, it must appear *to* something, and this something must be or contain awareness or consciousness. The theory of the American new realists, in a word, deals only with the objects of consciousness, and so it is not a theory of consciousness at all.

Here is the fatal gap in the theory, and the point, perhaps, may become clearer when it is approached in another way. Dr Ward's *Psychological Principles* is rightly regarded as the chief systematic work on psychology which any living Englishman has produced. We may therefore consider his analysis of the mind[2].

According to Dr Ward, psychology is the study of individual experience[3], and experience itself is the commerce between subject and object[4]. In the next place, he distinguishes the 'objective' from the 'subjective' aspect of experience[5]. The objective aspect of experience, he maintains, consists of sense data, images, and the like—in a word, it consists of presentations[6]. The subjective side consists of feeling and attention[7]. Dr Ward interprets 'feeling' very narrowly, for he restricts it to pleasure and pain[8], and he uses 'attention' very broadly, for he means by it any sort of perceiving, inferring, desiring or striving, and even what we should usually call inattention.

[1] *The Origin of Consciousness*, chap. I. pp. 31 *sqq*.

[2] The reader will see that I differ from Dr Ward on a great many points. My object is to elicit certain conclusions from his analysis of psychology, and neither to accept nor to criticise his view *au pied de la lettre*.

[3] *Psychological Principles*, *p*. 28.

[4] *Ibid*. chap I. especially § 3.

[5] *Ibid*. pp. 17 *sqq*., 30 *sqq*.

[6] *Ibid*. pp. 46 *sqq*.

[7] *Ibid*. *e.g*. General Analysis, pp. 55 *sqq*.

[8] *Ibid*. p. 45.

According to him there is attention whenever we are active enough to receive impressions[1].

It is clear that the analysis of the American new realists deals with what Dr Ward calls the objective aspect of experience, and omits the subjective aspect altogether. Anyone, indeed, who maintains that there is no distinctive stuff of consciousness has to argue that the subjective side of experience is really part of the objective side. Let us see then, what these philosophers say.

They begin with the argument that feeling is a sensation and therefore *in pari materia* with other sensations; and they can claim distinguished authority in support of this contention. Indeed, we should all agree with Stumpf[2] in believing that bodily pain and bodily pleasures, like the comfort of a warm fire or the smoothness of underwear, are sensations; and perhaps we should follow him in his further contention that the pleasures and pains of the special senses are very often sensations. Toothache and nausea, for example, are organic sensations, and the ache of the one and the diffused disagreeableness of the other seem to belong to the tortured organism. The pleasures of sight, again, are blended with the smoothness of ocular adjustment and that is an affair of kinaesthetic sensation. There is a bodily resonance, indeed, in all emotion, and the most refined delight has its own thrill of organic harmony. On the other hand, our delight in the neatness of an argument or in the point of a jest is not merely the smile, or the laugh, or any other bodily accompaniment. The bodily movements, indeed, may be repressed (perhaps by a rather painful effort), and the delight still be felt. Such delights, therefore (and the pains of remorse or failure), are certainly not sensations, even if organic sensations accompany them; and therefore the theory falls.

Indeed, there is no difficulty in distinguishing mental pains and pleasures from the pleasures and pains of sensation. The latter are organic sensations which are localised within the

[1] *Psychological Principles*, p. 49 and p. 60.

[2] *Zeitschrift für Psychologie*, XLIV. 1906, 1 *sqq.* Cf. Titchener, *The Psychology of Feeling and Attention*, Lecture III.

body. The former are not. They have no habitation in muscle or eye or ear, because they are not bodily at all.

Passing, then, from feeling to attention, we may ask whether attention belongs to the objective aspect of experience. The effect of attending to anything, it is generally agreed, is to increase the clearness of that thing and also to secure a certain dominance for it. Attention lays hold on a thing, brings its outlines into relief and tends to keep irrelevant things from appearing. There are differences, therefore, on the side of the object according as it is attentively or inattentively regarded, and the problem is whether these differences on the side of the object can be all that attention means.

This discussion may seem very strange, but the strangeness, after all, may be due to our own misconceptions. It seems absurd to ask whether things themselves are clear or obscure, because we always suppose that clearness or obscurity depends upon us. We are fully convinced that things themselves cannot differ in point of clearness, and therefore infer that these differences in clearness are manifestations of our activities. Still, this interpretation, spontaneous and inevitable as it seems, may be mistaken. To parody a famous saying of Hume's, "When we exclude consciousness, we really do exclude it." Is it not possible that this enhanced clearness, steadiness and dominance in the objects of attention is all that attention is, and that the attentive consciousness which we take to be the cause of these characteristics is only a myth?

In point of fact we should have no business to infer that these differences in clearness and the rest were due to attention unless we were acquainted with attention itself. If the attentive process can be observed it is possible to apply the usual logical methods and to infer that clearness results from attention because it increases as attention increases and is absent when attention is absent. Without this acquaintance the hypothetical cause of the increase in clearness might be anything under the sun. The plain man's certainty, then, is due to the fact that he is directly acquainted with attention itself, and not merely with its effects. But since this point is disputed I prefer to approach it gradually.

As we have seen, Dr Ward takes 'attention' to include perceiving, inferring, desiring and striving. This is not a common use of the term, and it is not a very good one. But that may pass. The point which I wish to put before the reader is the *difference* between these varieties of 'attention.' No one denies, I suppose, that perceiving is a different process from inferring, and that both perceiving and inferring differ from desiring. To infer an eclipse is very different from seeing one. It is one thing to see the Kaiser hanged and another thing to desire his execution.

My question is: How do we know these differences? We are as certain of them as of anything in the world, and there must be some explanation. What is it, then?

Plainly, the certainty cannot be due to any difference in the objects. There is generally a difference in the objects, it is true, when there is a difference in the mental experience. We do not perceive what we desire. The fox saw the grapes, but he desired to eat them; and eating is not seeing. No one, again, is dazzled by an inferred corona. On the other hand, some of these differences are independent of any differences in the objects. If one man tells me that Yorick is dead and another questions the statement, both of them refer to the death of poor Yorick, but one of them believes it and the other doubts. It is clear, I think, that the difference between believing and merely supposing, or again between desiring and inferring, can be readily discerned by inspection; but if the reader jibs he may be invited to consider what happens when we doubt and when we believe precisely and numerically the same thing.

It is quite certain, therefore, that some of the differences in what Dr Ward calls the 'subjective aspect of experience' do not belong to the 'objective aspect,' and surely there is no need to prove that doubting, supposing, believing, and the like, are conscious processes and that their differences are differences in consciousness. Any theory, therefore, which identifies consciousness with the objects of consciousness has failed in most elementary fashion. These objects of consciousness are not consciousness at all, except in the special case of introspection. Consciousness is the awareness of them, the striving for them,

the joy in them, not the things striven for, apprehended or enjoyed.

This finding changes the course of the debate. Consciousness, it appears, is different from the objects of consciousness, and we are directly acquainted with it. The problem is therefore, how we are acquainted with it, and what we learn from this acquaintance.

The simplest answer to the first of these questions is Locke's. The mind can notice its own operations. This simple answer, I think, is the right one, and I propose to defend it; but it is contradicted so flatly by so many eminent philosophers that its defence, unfortunately, is rather a lengthy business. For some maintain that we do not observe in this way, and others that we do not need to do so, and others that we could not if we would.

The first objection, I think, is contrary to fact and based on misconception. We can and do observe our own consciousness, and anyone who doubts this statement may perhaps see the truth of it when he considers the alternatives. We have seen already that our knowledge of our consciousness cannot be an affair of inference. If it were, there would not be any radical difference in experience between our knowledge of our own anger and our knowledge of the Apostle Paul's. In fact, however, we are directly acquainted with our own anger and not with the Apostle's, and our acquaintance with our own consciousness must depend upon observation unless it is a different species of awareness from any other. For knowledge is either observation or inference.

As might be expected, therefore, we have to meet the argument that our acquaintance with our own minds is altogether *sui generis*. This conclusion, we are told, is inevitable, since observer and observed are one in the case of introspection. We have to observe a saucepan in order to be aware of it, but we do not need to observe our anxiety in order to apprehend *it*. Anxiety is a mode of consciousness, and we are conscious of anxiety whenever we are anxious. There is no difference between the consciousness and our awareness of it, since consciousness is itself awareness.

This argument is thoroughly fallacious. In the first place, anxiety and the awareness of anxiety are not the same; for awareness is a kind of knowing and anxiety is an emotion. At the best, therefore, this argument would hold only of the awareness of awareness, and not of the awareness of emotion or striving. In the second place, it is abundantly clear that attention to our own minds is only an occasional process which need not be very efficient. Some psychologists even affirm that attention to ourselves always disturbs the current of our consciousness, and Turgénieff went further, for he said: "When my sufferings are unendurable I follow Schopenhauer's advice. I analyse my sensations, and my agony departs for a period." Be that as it may, it is plain that attention to our consciousness is not the same thing as being conscious. When we are conscious we are usually aware of our consciousness at least dimly, but we need not always be; and we have to attend very hard if we wish to discern the features of our consciousness accurately. What is more, we often make mistakes in this enterprise.

This obvious reflection, however, is often forgotten. M. Bergson forgets it in his theory of intuition[1], and all the mystics forget it when they argue that knowing and being are one in the case of the self. Now it is true that the self can behold itself, but this self-observation is never the identity of observing and being. If it were, how could there be any occasion for attending to ourselves? We cannot help *being* ourselves; and if our conscious being were identical with this knowing, we should always have a complete answer to all psychological questions through the mere fact of existing. The mystics and the intuitionists, indeed, can give no reason for the pains and labour which they think intuition requires. They tell us that anyone who would learn of them must make an unusually resolute effort to sink into himself: but if being conscious and knowing one's consciousness are one and the same, where is the need for this effort? We always are what we are without any effort whatever, and we do not have to struggle in order to become ourselves.

[1] *Introduction to Metaphysics, passim.*

Granting, then, that consciousness and the awareness of consciousness are not the same, it remains to consider whether this awareness of consciousness is a kind of observation. If it is, it has to dispense with eyes and ears, but that is no objection. Indeed, to cut a long story short, the difficulties that have to be met are really *à priori* difficulties. Berkeley has told us that there can be no awareness of activity[1], and the Kantians, following their master's lead[2], assert that there can be no awareness of awareness.

Berkeley's argument rests on confusion. We can certainly observe conscious processes as they occur, and this is the determining circumstance here. Activity, to be sure, is not observed if it is taken to mean the hidden spring of change, the mystery that makes motion move, but activity in that sense is a will o' the wisp like the 'force' of unreflective dynamics. On the other hand we can certainly observe our consciousness playing its part in bodily adjustments and in subsequent consciousness; and the experiences of striving, willing, and the like, may well be called active since they are peculiarly bustling and purposeful. Such consciousness, then, 'has hands and feet,' in the classic phrase, and we can see it at work[3].

We are left, therefore, with the celebrated dogma that there can be no awareness of awareness. The principal arguments in favour of this contention seem to be three, and we may consider each in turn. It is argued, *imprimis*, that such awareness is never a fact of experience; *deinde*, that whatever we know is an object, so that if consciousness is made an object it is therefore transformed utterly; *adhuc*, that knowledge always refers *beyond* itself, and consequently that it cannot refer *to* itself.

"I have to confess," Mr Russell says, "that the theory which analyses a presentation into act and object no longer satisfies me. The act or subject is schematically convenient, but not empirically discoverable....It seems to me imperative, therefore, to construct a theory of presentation or belief which makes

[1] *Principles*, § 27.

[2] *Metaphysische Anfangsgründe der Naturwissenschaft.*

[3] Cf. James, *Essays in Radical Empiricism*, pp. 155 *sqq.*

no use of the subject or of an 'act' as a constituent of a presentation[1]."

It must be admitted that it is difficult to observe acts of knowledge. Our thinking processes, it is plain, are thoughts of something, attention to something. It is unlikely, therefore, that they could be isolated and set up for inspection by themselves; and certainly they are not isolable in this way. None the less, these acts of attention and belief can be discovered empirically for the reasons already given. When we consider doubting, believing and supposing, for example, we can observe very clearly that these attitudes may refer to the same object and yet differ intrinsically. This difference is plainly a difference in the character of the mental processes themselves; and we cannot observe these differences in the acts without observing these very acts. The trouble is that when we look for knowledge we often expect to find something more than the process of apprehension, and therefore may be inclined to dispute the existence of knowing just because we find nothing except knowing. And that is not a reasonable objection[2].

The objection that the observation of consciousness transforms it into an object may be dismissed very briefly. The primary function of knowledge, it is true, is to know something that is not itself, but this does not prove that knowledge itself, or any other form of consciousness, cannot be known. As I have said in another place, "To be directly acquainted with anything, and to be directly acquainted with that thing 'as an object,' express precisely and numerically the same fact. The subject 'as known' or 'as an object' is just the subject itself. If we are acquainted with it, then we are acquainted with *it*, and no qualification of this statement is permissible

[1] 'Problems of Science and Philosophy' (*Aristotelian Society*, Supplementary vol. II. 1919), pp. 25, 26.

[2] I assume that Mr Russell means that the *knowing* subject is not empirically discoverable. It is nonsense to say that the feeling and striving subject is not. And perhaps I may add that the analysis of act and object has suffered some harm by Mr Moore's description of 'acts' as 'diaphanous' ('The Refutation of Idealism,' *Mind*, N.S., vol. XII. (1903)). The diaphaneity of an act of knowledge, as I understand the description, only means that the characteristics of the act do not appear in the object, and not that the act has no observable characteristics when attention is paid to it.

unless the acquaintance is mistaken, or the word 'object,' for purposes of technical convenience, is defined in some restricted sense. Nothing can be transformed in any sense whatever simply owing to the fact that it is known. To suppose the contrary is scepticism[1]."

The third argument is equally inconclusive. The process of knowledge, it is true, refers beyond itself, and therefore an act of knowledge can never be aware of itself. This fact, however, does not justify the inference that acts of knowledge cannot be observed. Such acts cannot observe themselves, but why should not another act observe them? Introspection is a deliberate inspection of awareness, and the empirical evidence strongly suggests that it is always a different act from the act of which it is aware. Our minds, however, are rich enough to contain a multitude of awarenesses almost at the same moment. For thought is quick. In a word, observer and observed are one in introspection, because the act of introspection and the experience which it observes form part of one and the same mind, but this circumstance does not imply the absurdity of an act of attention attending to itself.

We conclude, then, that consciousness can be directly observed, and this result is of the utmost importance for psychology. Psychology is the study of the mind, and the phenomenal mind is just the living continuity of desiring, choosing, perceiving, and similar experiencings. It is these processes in their union, and it is nothing else. What is more, there is no good reason in metaphysics for maintaining that this phenomenal self differs from the real self. It would be otherwise if our acquaintance with it could be discredited; but that, we have seen, is not the fact. It would be otherwise, again, if any phenomenal thing had to have a noümenal basis which always eludes observation, but this metempirical nucleus of thinghood is only a sort of transcendental blessing upon a union which God has already decreed without the laying on of philosophical hands. Substance is always a descriptive term indicating a unity which exists *de facto*. It does not make the connectedness of properties; it only describes their connected-

[1] Article, 'Introspection,' *Mind*, N.S., No. 112, pp. 396, 397.

ness. It is not even an accessory after the fact. Minds are substances simply because desiring, willing, and knowing do not float about loosely. They always unite in a personality, and this united fact *is* the spiritual substance just as the cohesion of certain molecules is the whole substance of a pie-dish. The self, to be sure, is not the same sort of thing as a pie-dish. But that is another story.

What objections are there to this conclusion?

It may be said, in the first place, that the self, after all, may only be the body. The plausibility of this argument disappears, however, when the argument is sufficiently precise to be worth considering. As we have seen, it is easy enough to show that consciousness continues the work of the nervous system and even that it does the same kind of work in certain cases. These suggestions, however, are not proofs of identity. Does the brain discriminate, judge or infer, does it choose or resolve, does it feel and enjoy? To ask these questions is surely to answer them. We know what these processes are because we can observe them, and we know that we could not observe them if we turned our lenses upon the brain after some delicate operation of trepanning. What is more, we know that this consciousness which we observe is different in kind from anything that could be observed in the brain. The only reasonable conclusion, therefore, is that consciousness is not cerebral movement. If the brain is the coloured, irritable, convoluted pulp that physiologists study, then this quivering indented thing is not the mind; and to say that it may *also* be conscious is only a quibble. For anything one can prove to the contrary, some pebble on the side of Ararat may have spent the days and nights of the Flood in working out differential equations, but then it was not the sort of pebble which Dr Johnson kicked or physicists consider. If the brain means what physiologists mean by it, it is not a mind. If not, you may ascribe to it any properties you choose, but it is mockery to call it only a brain.

It may be said, in the second place, that the work of the mind is far too arduous and too intricate for mere consciousness to perform. At the most obvious empirical level, consciousness is nothing without memory or retentiveness, and

consciousness itself, fleeting and evanescent, is not even a permanent condition of its own retentiveness. Here, surely, is a singular argument. If consciousness is really continuous and retentive it cannot also be less retentive than it is; and if it is fleeting it must be at least as retentive in its fleetingness as we find it to be. Nothing ever accounts for itself, and the only sense in saying that a thing accounts for part of itself is to show the interconnectedness of its parts. It is useless, therefore, to suppose that the self, or anything else, could account for memory otherwise than by having the function of memory deeply implanted in it. And it is plain that memory belongs to the self in this sense. Systematic description is the only possible explanation of such matters.

A systematic description of the self, it is true, is incomplete in many particulars. For the self is a continuant, and we only observe fragments of it in introspection. In this respect the self is like any other empirical thing. Our conscious lives are infinitely richer than the casual records of introspection; and introspection, perhaps, is not very thorough, even when it is careful. The conscious self, therefore, is very largely an inferred thing, but it is not merely inferred, since its principal features and the outlines of its connectedness can be observed introspectively. True, the fragments of consciousness which we observe in this fashion do not do the whole work of consciousness. But then they are only parts of a conscious mind.

There is no difference in principle when mind is taken at its highest level. Kant's proof of the unity of apperception showed, once and for all, how subtle knowledge is; but even if the most commonplace judgment implied all the principles of logic and most of the categories, that in itself would not show that empirical consciousness is incapable of the work of knowing; and Kant's other arguments on this question make quite unnecessary assumptions. As his most recent commentator points out, Kant's theory implied the consequence (which Kant himself was very loth to accept) that "the activities generative of consciousness have to be recognised as themselves falling outside it. Not even in its penumbra, through some vague form of apprehension, can they be detected. Only the

finished products of such activities, not the activities themselves, can be presented to consciousness; and only by general reasoning inferential of agencies that lie outside the conscious field can we hope to determine them[1]." Kant held, therefore, that the work of thinking was performed by an unknowable and indispensable faculty which he called productive imagination, and his argument has appealed to many philosophers. It rests on the assumption, however, that consciousness requires 'generating activities' outside itself, and there seems to be no good reason for denying that consciousness does its own generating. Conscious knowledge is just knowledge at work—a piece of being, strenuously alive.

It may be objected in the third place that the real and the phenomenal self cannot be identical because personal identity belongs to the real self and because it is not found in our consciousness. There is no identity between our childish escapades and our present dignified and important pursuits; and even when childhood is left out of account, there is little identity between Lord Braxfield on the bench and Lord Braxfield in his cups, or between John Newton the pirate and John Newton the hymn-writer. Indeed, it is needless to consider these striking instances, or the still more extreme cases of William Sharp and his feminine personality "Fiona Macleod," or of multiple personality in the Hanna case or the Beauchamp family. The same kind of abrupt variation, we are told, occurs in every life although we are too little reflective to rate it at its proper worth.

There are two questions to consider here, a question of logic and a question of fact. The logical question concerns the meaning of identity. If nothing is identical unless it persists unchanged then, plainly, there is no such thing as personal identity, and there is no identity of body or brain. Neither mind nor body persists unchanged, and it is foolish to speak of their identity in this sense. If there is any pitiful remnant of unchanging consciousness in us, this dubious residuum is certainly not ourselves, just as our bodies are not those scraps of tissue, if there are any, which have never been renewed.

[1] Mr Norman Smith's *Commentary on Kant's Critique of Pure Reason*, pp. 263, 264.

Personal identity, therefore, is either a mere fiction or else it does not mean unchanging existence. If it is a fiction, it shares the illusion with any other existing thing. If not, identity must be sought, not in unchangeableness of material, but in continuity of character and function. And this brings us to the question of fact. Our bodies remain the same, not because they are composed of the same material, but because they retain the same type of organisation in similar material; and identity in this sense also holds of personal consciousness. Any self has a certain typical organisation. The emotions are organised into sentiments; inherited habits unite with acquired ones to make a formed will and a formed character; and knowledge is organised too. Our knowledge is complex in its simplest manifestations. It is charged with meaning and servile to a host of principles. It has to look before and after in order to look at all.

That is personal identity in general. In particular, each self is born different, and acquires its own individual organisation. What is acquired may lessen the original differences or it may accentuate them. The army or the public school may standardise men, and a bohemian existence may foster the same sort of imitative eccentricity. On the other hand, each member of the same family or school or nation sets about living in his own way, and each makes something different of his capacities and opportunities. These personal differences persist despite the most radical changes of outlook or opportunity. When a timid sinner is converted, he usually becomes a timid saint; and even when he is made strong out of weakness, his strength has quite a different fibre from the strength of those who were strong before. A man's feelings, again, are not a child's. The man outgrows his childhood, as he outgrows sailor suits and a taste for Henty, but we can see the marks of his childish selfishness in his manhood's considerateness, and we can feel his boyish shyness quivering through his sophisticated *aplomb*. If the man himself is too blind to trace this continuity, his mother is not.

Personal identity, then, is not a superstition. It is a reality; and the most serious difficulty in it is not the variations of personality, but the recurrent annihilation of conscious

personality in sleep, and its occasional annihilation in a trance or in an accident. That, of course, is the standing argument in favour of materialism. It takes courage to defend conscious identity when it evaporates with a breath of narcotile, and when a brickbat sends it spinning. On the other hand, it takes foolhardiness to deny it. Peter wakes up the self-same Peter every morning. He rises earlier than usual if he has to catch a train, he starts at a burglar's stealthy tread, and he is the same old Peter in his dreams. Perhaps, then, it is unlikely that Peter's consciousness vanishes utterly during sleep, but there is certainly very little empirical evidence of it during profound slumber, and none at all when Peter is under chloroform. Peter's identity, therefore, may have gaps in it, for sometimes there seems to be no Peter at all. And why not? Peter is Peter *when he exists*. When he does not exist, there is naturally no Peter.

Conscious personality, therefore, is not unbroken existence, but it is distinctively individual in a way that is matched by nothing else that we know. Some have supposed, even, that there is an ultimate metaphysical principle to the effect that no part of a self can also be part of any other self; and the facts of experience, with a few dubious exceptions, would certainly support this metaphysical principle. Castor and Pollux may have similar thoughts when they think of the same thing, but Castor's thoughts do not pass into Pollux. All this is commonplace, to be sure. I mention it—apologetically—because it is true.

We are told that this is precisely the principle which all good Platonists are most concerned to deny[1]. It ossifies the self into a repellent unit, it is perversely 'linear' where it should also be 'lateral,' it exaggerates the unity of finite selfhood and substitutes a supposititious entity for a description of fact, it loses sight of the truism that the state is more individual than any of its members, and it ignores the fundamental canon of all true philosophy that nothing can be

[1] W. R. Inge, 'Platonism and Human Immortality,' *Aristotelian Society Proceedings*, 1918–1919, p. 286, referring to Bosanquet (*Proceedings*, 1917–1918, pp. 482 *sqq.*)., and to his criticism of the present writer.

individual short of the whole. These are high matters and I must forbear to debate them at length. But I shall hazard a few reflections.

If the cosmos be indeed a unity whose all-encompassing extent is welded in an indivisible harmony, its members may still have an individual office and themselves be worlds within a world. A monistic metaphysic, on this interpretation of monism, has room for Leibniz as well as for Spinoza, and neither 'good Platonists' nor good Hegelians should take sides on the question. No one claims, however, that mortal man can discern either the cosmos or its members in their fulness of harmonious being; and it should not be at all astonishing if some parts of the whole exhibit a greater degree of unity than other parts or than the whole itself. If conscious selves are the best examples of individuality that we know, neither monists nor pluralists should be surprised.

The statement that anyone who believes in the reality of finite selfhood therefore considers the self a bare or repellent unit is a piece of scandalous sophistry. Nothing is repellent, or isolated, or shrunken, or dreary, simply because it is itself. A man does not lose his individuality by cooperating with others, or by sympathising with them, and those who worship 'organic unities' have no reason to draw this consequence from their beloved metaphor. Heart and brains and liver do not transfer their characters from one to another. On the contrary, a differentiated organism details its functions to specific organs. There is nothing in our theory to prevent the most strenuous belief in the impossibility of 'self-realisation' apart from social influences, although, equally, there is nothing to compel this inference unless the facts prove it of themselves.

It is the same with 'linear' and 'lateral' identity[1]. The 'lateral' side of the self apparently consists of everything which personality touches, the lives of others, the fruits of the earth, and anything which a man's interests concern. If our view is correct, this 'lateral' aspect of personality is no part of the person, but we certainly do not deny that we really have these interests and possessions and influence, or that our lives

[1] Bosanquet, *op. cit.* p. 498.

may be spent in their service. A general does not cease to control his soldiers just because he and they are different beings, and those who know Pan and old Silvanus and the nymphs of the field do not therefore become part of the soil.

We know enough of the self to be able to scan its main features, and to be justified in believing that the hidden mind is of a piece with the mind that is known. Indeed, we know what we are, sufficiently well to be much more confident of the reality of our conscious personality, as a finite discoverable thing, than of the reality of the transfigured selfhood which so many philosophies proclaim. We are not adjectives of the cosmos any more than a dog's tail is an adjective of a dog, and the characteristics which belong to us need not belong to the universe. And, as we have seen, we are not adjectives of the state, even if that institution, by some light-fingered subreption, is first of all identified with the community and thereafter with the Athenian πόλις.

Those who look at nature from the side of physics commonly incline towards monism, while biologists and psychologists are usually pluralists because of the striking individuality of the things they study. These tendencies, however, need not coerce anyone, and many biologists take the race to be more individual than the organisms which mark its passing, and dream of a world-organism intercellularly diversified into living things. Indeed, there is no way of proving that the universe is either fundamentally one or fundamentally many, and realists need not enter into these lists. For the pluralism in which realists believe is a logical pluralism, not necessarily a pluralism of existence. On the other hand, any monism which seeks to discredit the empirical unity of empirical things, or to cast doubt upon the possibility of any knowledge unless the knower is also the whole of existence, should be disputed to the hilt. We may be parts of a stupendous whole, but at any rate we are ourselves; and the reality of self-reliance, responsibility, personal freedom and individual judgment are worth fighting for. Realists need not deny that the self is *also* a part of the cosmos and knit with it. But it is *at least* a self.

CHAPTER IX

THE LARGER OUTLOOK

I am very sensible that on such subjects arguments fall short of evidence....I shall nevertheless go on as I have begun, and proceed, by reason, by conjecture, and by authority, to cast the best light I can on the obscure paths that lie in my way.

BERKELEY, *Siris*.

CLASSICAL philosophy has always striven to include a conspectus of the achievements of the human spirit. It has dealt with these achievements in the large, of course, and from a standpoint of its own. For philosophy is more analytic, more critical, more synoptic, than any science or art or religion, and it is a cosmology rather than a cosmophany. None the less, philosophy searches all these regions in its own philosophical way.

It is a common complaint, then, that realism is unfit for the burdens of this office, and so that it is not philosophy at all. It is only a cobbler without large designs, a seeker of trifles, not the spectator of all time and of all existence. It is a temple without a Shekinah, workmanly enough in its outer courts, and, for the rest, empty nothing. It is a poor drudge, stolid, flat, ponderous, obstinate, clumsy and rude. And if these names are too hard, the best that can be said for realism is that philosophy has a place for it, just as art needs realism for its own artistic purposes although, in itself, it is above realism. Realism in philosophy, we are told, has no 'central standpoint,' so that its criticism is only a sort of guerilla warfare without any strategy, and its conclusions valueless, except accidentally, since they lead nowhither. It 'has little capacity for solving ultimate problems[1].' And so forth and so on. It is impossible to set a period to these

[1] See *e.g.* a review in *The Times Literary Supplement*, Sept. 18, 1919, p. 492.

sententious and wary sagacities; for the patient critics of realism are as contemptuous as they dare, and the others are as contemptuous as they feel.

Now it must be admitted that many idealistic philosophies have at least proved their mettle by grappling resolutely with the high problems they have set themselves. They have attempted to give a synthesis of art, morals, religion, and the sciences; and they may reasonably claim that intransigeant denials and a few forays in the way of pithy argument are not enough to refute them. Moreover, they may claim with some show of reason, that realists have never done their own work thoroughly. Realism claims to be a theory of knowledge, and yet realists have seldom made any systematic attempt to bring the whole of knowledge under review. Realists have analysed logic and mathematics very fully, and have also discussed the problems of perception, of applied mathematics (especially physics), and of ethics, as well as many nice psychological problems in the theory of knowledge, but even if these problems are cardinal for any philosophy (and some of them certainly are) the sum of them is manifestly incomplete in comparison with what a theory of knowledge ought to be. If realism is a genuine theory of knowledge, it must be a theory of *all* knowledge, and so it should deal with art and history and religion and biology as well as with logic and physics. Rational reflection can deal with these matters; and the idealists maintain that they have tried to be realists in their investigations, and that they have learned from their failure that realism is not enough.

The assumptions of realism, as I understand the theory, are that knowledge is always the discovery of something: that anything discovered is distinct from and independent of the process of recognising it: that nothing which is known is *therefore* mental except in the way of being selected by a mind: and that if any selected thing is mental or mentally tinged *de facto*, this circumstance does not affect the kind or validity of our knowing of it. The opponents of realism argue that these assumptions prove to be quite inadequate when anyone comes to take them seriously, since there is a kind of

imaginativeness and constructiveness in all important thinking which is only mocked unless realism is superseded by some more penetrating theory.

Even the physical sciences, it is urged, need much more than observation and logic to have any body to them. Science would not advance a step without the sagacious use of hypotheses, or without the trained imagination that frames them. And hypotheses are imaginative constructions, What is more, observation itself, scientifically regarded, is only the occasion for constructive theory; probability is a tissue of construction which leaves the given just because it is merely probable; and the laws of the sciences are flights of the logical imagination. The world is what we make, and science is what the wit of man has made and assimilated at any given epoch.

It would be easy to expand this argument almost to any length now that the instrumentalists, the pragmatists and the absolutists have shown the way; and I have not the space to defend realism in more than a very summary fashion. The most that can be expected in any discussion short of a treatise is an enquiry into the most critical respects in which realism is found wanting, especially on the ground that it cannot find a place for constructive imagination in the physical sciences; and the chief of these respects are probability on the one hand, and hypothesis on the other.

It is said that things are always determinately what they are, so that they are never only probable, or only probably so and so; and we are asked to infer from this that probability is only a conjectural construction and not the discovery of fact. This consequence, however, does not follow at all. Probability, as we have seen, is the logic of relevant but inconclusive evidence. The probability of any proposition, therefore, is the logical conclusion from the evidence that supports it; and certainty is only the special case in which the evidence is quite conclusive.

To be sure, we have to distinguish between probability and the numerical measure of probability. The latter may be inapplicable in some cases of probability, and it always presupposes certain conventions which are at least remotely

disputable. But probability itself need not be disputed just because probability-fractions sometimes may be. Again, we have to be careful to notice the respects in which probability seems to be a subjective affair. It often happens that some proposition becomes increasingly probable as our knowledge increases, and it is natural to conclude from this that probability itself is mental. That is a mistake. Probability never changes when the evidence remains the same; and when we have more relevant information than formerly, the increase in the probability is a consequence of the difference in the evidence. A man who knows that the dice are loaded, therefore knows that double sixes are more likely than chance would suggest; but, when he knows this, he still knows what the probability would be if they were not known to be loaded; and this piece of information remains unaffected by his subsequent discovery. Relatively to any given piece of evidence, probability does not vary at all.

Conclusiveness of evidence is a matter of degree. The evidence may preclude other possibilities or it may not, and, if it does not, its inconclusiveness can be conclusively proved and also the degree of its inconclusiveness. Anyone, therefore, who maintains that probability is constructive or imaginative must also maintain that all inference is imaginative or constructive; and that, precisely, is what we deny.

But what of hypotheses, postulates, assumptions, *et id genus omne*? The hypothetical method pervades the sciences, and hypotheses themselves vary from a slight analogical extension to an admitted makeshift or a mere *ballon d'essai*. Hypotheses, surely, are made and not found. There is will in them as well as intellect, and if they are not imaginative constructions, what in the world are they? A sailor noticed the peculiar properties of Iceland spar, and brought a piece of it to Bartholinus. Bartholinus observed what the sailor observed, but he guessed more; and Huyghens, setting his imagination to work, proved the laws of double refraction. Realism, we are told, might account for what Bartholinus and the sailor observed, but it cannot account for Huyghens's imagination, and that is a proof of its hopeless inadequacy as a theory of knowledge. The inward

eye is the light of science. Even those who, like Kirchoff and his school, take science to be only the compendious description of phenomena, do not mean by 'description' what their realistic phrase naturally suggests. Their 'descriptions' are not narratives or accumulated observations. They are the invention or construction of imaginary things which are substitutes for perceived ones, and description, according to this way of it, is the economical manipulation of these substitutes in such a way as to find the smallest set of symbols which corresponds to the unmanageably intricate phenomena.

This argument is striking and it reaches as far as any science worth the name. But there are holes in it.

Let us grant, for the sake of argument, that all hypotheses are mere figments of the mind, mental products through and through. What follows? The products are what we choose to make, but after we have made them they are discoverable things. Making a thing is not the same as recognising it. It is one thing to do something, and quite another thing to know what we have done; and even when we have made things consciously there may still be a great deal to learn about them. To do anything consciously is only to be aware of it, in some measure, while we are doing it, and it is common enough for a man to make suggestions or hypotheses which carry him further than he would, or are fully intelligible to his successors only. That, indeed, is the history of all fertile ideas, and this fertility of ideas, it would seem, is something which has to be discovered in the same sense as the colour of a cat's eyes. Whatever the mind constructs, in a word, must also be apprehended, and the apprehension of mental constructions or imaginings does not require any peculiar mode of knowledge. The construction confronts the mind, and the mind is directly aware of it.

That is one point, and another point leads to similar reflections. It is usual in the logic-books to distinguish between hypotheses concerning laws and hypotheses concerning causes. Hypotheses of the former class are suggested formulae of correlation, and those of the latter class are either agents (to use popular language) or else the medium of some agency. All

'models' of the type of the luminiferous ether or Faraday's 'tubes of force' belong to this class, and so do Robinson Crusoe's dismayed belief that the footprint meant a man, or any suggestion like "Cherchez la femme." In addition to these two classes we may perhaps add a third class of merely conceptual models. According to Hertz, for instance, the ultimate problem of dynamics is the invention of images which are thought-substitutes for phenomena, obeying the same laws because they have the same logical properties[1].

In all these cases, it would seem, knowledge has the same task of observation and inference before it, and the principles of such knowledge do not seem to differ from those discussed in the earlier chapters of this book. A formula, plainly, must be apprehended like anything else, its implications depend upon the laws of deduction, and its correspondence with the facts is something which the mind simply finds. Hypothetical causes, again, may be merely supposed or constructed, but their mode of working must be *given* if these conjectures have any plausibility at all, and they collapse of themselves if any other agent can be shown to have done the work. Robinson Crusoe's belief was an inductive inference of the ordinary type in which the ground of belief rests primarily upon repeated observations, and he would have rejected it utterly if he had found that an imp or some carved wreckage from the ship had made the footprint. And so of the third class. These conceptual models must be apprehended by the mind, and the mind has no option about them once they are formed. If their logical properties correspond to those of the phenomena, these properties of the images and of the phenomena, together with the precise correspondence between the two, are the same in principle as any other piece of logical correspondence; and the very simplicity of the images is also a determinate and discoverable property of them.

These arguments, therefore, prove at the best that the mind can construct as well as know, that it may know its own constructions, and that its knowledge of these constructions is often more serviceable for action and for speculation than

[1] *The Principles of Mechanics*, at the beginning.

direct perception of the phenomena. Moreover, these statements are true under a most significant limitation. The constructions must be known to have the same general properties and type of connectedness as the phenomena they represent, and the adequacy of their representation must be constantly checked by direct observation. Still, this limitation does not alter the fact that we often think of symbols and substitutes instead of their originals, and if these symbols are our own constructions the positive thesis of the argument is sound. On the other hand, it does not contradict realism; for realism does not imply that the mind cannot construct or that its constructions cannot be known. And yet, when we examine these constructions, we find that this making is at least three parts finding. Formulae, and hypotheses too, are selections from reality. They are schematic facts, or facts considered in an unfamiliar connection; and scientific imagination itself may not prove to be anything more.

Let us pass, now, to the biological sciences which have recently received so much attention. Biology, to be sure, is still empirical and opportunist in a sense in which physics is not. On the other hand, it is mere bigotry to assume that physics and chemistry are the only genuine sciences and that biology is mere guess-work. Undoubtedly the event may prove that the physics of osmotic pressure, or of the formation of sand-ripples and other symmetrical patterns, or the chemistry of colloids, may also include the main principles of organic assimilation, restitution, reproduction and regulation. That is the dream of the 'mechanists,' though it is hard to see why anyone should suppose that chemistry, to say nothing of biology, is nothing but mechanics. Indeed, the event may prove that the organisation and behaviour of living things has principles peculiar to itself; and it would certainly be odd if these extremely complex and unstable compounds had no peculiar properties or peculiar principles. If water has properties which cannot be reduced to the properties of hydrogen and oxygen taken separately, is it not improbable to the last degree that the principles of inorganic and unorganised things are fitted, by themselves, to explain organic life?

But we may leave this dispute. Even if it could be proved, to take the most extreme case, that organisms have a type of unity which lifeless things do not possess, that their character (despite the Mendelists) cannot be calculated, that the repetition of an errand-boy's rap or of a miner's pickaxe is not comparable to anything in mechanics, that the substance of the living is sharply divided from the substance of the dead, and that all biological development is irreversible in time whereas physical laws are not, there would still be no good reason for denying that the mind discovers and accepts these biological facts and principles in the same sense as any others. The whole problem, indeed, might be dismissed as irrelevant to the present enquiry were it not that certain authors loudly proclaim its relevance. Biological facts and principles, they allege, are not merely profoundly different from physical or chemical facts or principles, but they differ in such a fashion that it takes a different kind of knowledge to understand them. In these affairs, logic and observation have to give place to sympathy and intuition.

This thesis is commonly supported by such arguments as the following: Life, it is said, *ex vi termini*, can only be felt, and dare not be intellectualised. Living things are ultimate centres of spontaneity, creative and themselves uncreate, radically novel and therefore superior to rules. There is a continuity in life which defies the intellect, and time is lived through, not disarticulated like the successive movements of an electric clock. To answer these arguments in detail would lead too far afield, but I should like to point out that the proposed substitute for thinking and observing is utterly futile, and that observation and inference are the only means of attaining truth in the biological sciences.

The first point may be proved very simply. Intuition, in M. Bergson's sense[1] is cabined within the self, and sympathy is only a projected feeling which may perhaps be attuned to the same pitch as the feeling of the person or animal to whom our sympathies go out, but is never identical with that feeling. If life, then, can only be felt, the lives of others cannot be

[1] See his *Introduction to Metaphysics*.

felt; and nothing could be more perversely intellectual than an argument by analogy from our own feelings to the feelings of a wasp or a caterpillar. It is very doubtful, indeed, whether life (itself) can ever be felt, or whether, as some suppose, feeling is just life at a certain degree of tension. Even if it were, however, we can feel our own lives only. One man does not become another even in the contagious gloom of a common defeat or in the spreading hilarity of Armistice Day.

Our second point is also manifestly true. There is no way of studying living things except by observing them and inferring from our observations. We observe beetles in the same way as we observe balloons, we classify lepidoptera by the same logic as we classify crystals or alkalines, we see to the hatching of chickens by the very rules which we use in making water boil at a certain temperature. Biologists, to be sure, have need of imagination. As Mr D'Arcy Thompson reminds us, "It has taken great men to discover simple things[1]," and the motto he quotes from the *Vegetable Statisticks* of Stephen Hales is singularly apposite. That pioneer among physiologists and admonisher of gin-drinkers sagely opined that "the reasonings about the wonderful and intricate operations of nature are so full of uncertainty that, as the Wise Man truly observes, hardly do we guess aright at the things that are upon earth, and with labour do we find the things that are before us." That is true universally in the natural sciences and particularly in biology. Karyokinesis does not show itself like the drift of a summer cloud. If cell-division depends upon the asymmetry of surface-tension, it takes a very penetrating vision to discover how and why. Even the problem of correlation, as Cuvier conceived it, needs the master's skill and not the journeyman's. Again, the development of the individual is not a thing that can really be traced continuously, and the interpretation of gametes and their doings is nearly as constructive as the gametes themselves. The observer has to fill in far more than meets his eye; and if ontogeny is constructive in this sense, phylogeny is still more constructive. To pass with Darwin to the origin of species from Malthusian

[1] *On Growth and Form*, p. 8.

theories of population and the breeding of domestic pigeons would naturally be described as a tremendous synthesis, and von Baer's idea that phylogenetic evolution is recapitulated in the embryo was certainly not a mere transcript from the surface of things. There is no disputing these facts, therefore; but there is interpretation of them, and our interpretation must wait for a little. The problem of development is substantially the same as the problem of history, and imaginative construction in the sciences is so nearly akin to creation in the arts that it is best to consider it in that connection.

Let us turn, then, to the human sciences and begin with economics which (except for history) is the most important and the most highly developed of them. Economics, indeed, is so highly developed that it has had time to pay considerable attention to its scope, assumptions and methods. Consequently there has been a sharp division in the schools between historical, descriptive and realistic economists (as they call themselves), and deductive, abstract ones. The best modern economists, to be sure, do not subscribe to the articles of either creed, and even those economists who, like Ricardo, tend to be as severely abstract and deductive as they can, or, like Schmoller and Menger, as sociological and historical as possible, belie their occasional professions in their practice, and sometimes in their general discussions. Schmoller declares, indeed, that the defects of economic dogmatism can only be remedied by consulting the whole body of historical and statistical material now existing[1], but he does not try to depose deduction in his general account of economic methods, and he maintains that the descriptions in economics are tested and determinate observations whose logic is thoroughly sound[2]. He holds, it is true, that there are limits to logic, and that all reflection, in the end, needs the support of general and genial intuitions concerning the ends of God or history or creative nature[3], but he does not suppose that these limitations invalidate logic or observation.

[1] *Zur Litteraturgeschichte der Staats- und Sozialwissenschaften*, p. 279.
[2] *Grundriss der allgemeinen Volkswirtschaftslehre*, vol. I. p. 101.
[3] *Ibid.* p. 111.

These disputes concerning the method of political economy have a special importance for the subject of this chapter. To be sure, we may neglect the claim of the historical school to be 'realistic,' because realism in this sense means concreteness, and philosophical realism need not be peculiarly concrete. Our interest in the controversy is different. The ultimate claim of the historical school is that a theory of economics which relies wholly upon logic and detailed observation is necessarily inadequate, even granting the truth of its specific observations and of its individual chains of reasoning. Political economy as a whole, we are told, is too large for these methods, too complex to be observed in detail or to be made the subject of experiment, and too human a thing to be dissected or to be followed out into its logical structure. Other methods are needed, therefore, and a different ideal of truth.

We need not consider the complaint of those who reject the 'dismal science' of economics on the ground that it studies wealth irrespective of welfare, or that it is pledged to that 'vulgarest saw' which states that time is money. The study of exchangeable commodities does not imply that a man's soul consists of the abundance of his goods. Again, it does not follow that an attempt like Ricardo's to consider the effects of free competition without reference to other conditions is worthless in itself or useless in practice. Competition, it is true, is not free in fact, but it is free enough to make its freedom worth selecting for study. The only inference that can properly be drawn concerning such attempts is that they are not, and never should pretend to be, full descriptions of the whole countenance of complex society. No one ever thought so, although a few may have neglected to state clearly that they did not think so. It would seem, then, that if economics had to select its grounds in this way and had no other alternative, the only consequence would be that the science of economics could not give a full account of social happenings; and that is not an objection to economics. It is only an objection to the overweening presumption of ignorant economists who mistake their science for general sociology; and no science is responsible for the mistakes of its zealots.

The real objection to 'abstract economics' is different from this one. Selection of principles, induction and deduction, are not only necessary for economics but its salvation. The trouble is that the principles of economics are themselves insecure, and that its deductions limp in their logic. Parts of the science, indeed, may be relatively free from these difficulties. The theory of banking, apart from special circumstances of legal enactment, may be able to make a fair show of autonomous logic, and Mr Withers, perhaps, can justly claim that "above the war-flood which has drowned so many of the landmarks by which the students of exchange were taught to steer, there still rise, serene and stronger than ever, the pillars on which the chief laws of this science are engraved[1]." But it is otherwise with economics as a whole. The methods of economics can never succeed in studying quite exactly the doings of "mankind in the ordinary business of life[2]," or investigate "all lawful ways of making a living[3]," or "that part of social organisation which is related to human wants and human efforts directed to the satisfaction of these wants[4]." Yet this is what economics claims to do. Indeed, abstract economics, as it is currently defined, assumes a certain typical psychology of mankind and professes to draw its conclusions from this source. Mr Flux, for example, says that he adopts the *a priori* or deductive method, but he bases his reasoning, in fact, upon psychology. He assumes the principle "that men desire wealth and endeavour to secure it at as little cost to themselves as possible[5]"; "the recognition of the tendencies which lead to the multiplication of the human species, and the conditions which limit the increase of numbers[6]"; the principle "that men are capable of judging of the efficacy of means to an end, and that the easiest means will be chosen to reach any desired end[7]"; and "the principle of the satiability of wants[8]."

[1] *Money-Changing*, Preface.
[2] Professor Marshall's definition of economics, *Principles*, Vol. I. p. 1.
[3] Mr Henry Clay's definition, *Economics for the General Reader*, p. 1.
[4] Mr A. W. Flux's definition, *Economic Principles*, p. 5.
[5] *Op. cit.* p. 14.
[6] *Ibid.* p. 15.
[7] *Ibid.* p. 15.
[8] *Ibid.* p. 15.

These professions seem very hollow to any serious student, not because they are abstract or even because the psychology of them is superficial, but because economics is not really a rigorous piece of deduction from principles of this kind. Economists rather discuss how the workmen and the capitalists in a civilised community (supposing them to be reasonably intelligent) should set about to further their own interests. This science of ways and means, however, cannot possibly be a piece of rigorous demonstration, since the logic of ways and means presupposes a matter-of-fact description of economic conditions, and since the consequences which are inferred are effects which are only probable and not certain. Economists select certain important facts out of the welter of social happenings, and draw probable inferences from these selected facts. If they did not profess to do more than this, they would have nothing to fear on the score of logic or truth; but, in fact, they make larger claims and fail to carry them out.

When economists forget their general definitions, they succeed, very well, in describing the skeleton and the arteries of business; and they made trustworthy predictions before the war. Their science, therefore, is of the first importance; and it is not easy. As Professor Marshall says, "The economist needs the three great intellectual faculties, perception, imagination and reason; and most of all he needs imagination, to put him on the track of those causes of visible events which are remote or lie below the surface[1]"; and he goes on to say that "economic studies call for and develop the faculty of sympathy, and especially that rare sympathy which enables people to put themselves in the place, not only of their comrades, but also of other classes[2]." These remarks are most just, and they are valuable, not only on account of their justice, but also because they show very precisely what sort of imagination and sympathy is needed in economics. Imagination of this kind is insight and deeper perception, not volatile fancy. It burrows into things instead of trying to escape from them. It discovers rather than invents. The sympathy that is needed, too, is just

[1] *Principles of Economics*, vol. I. p. 43. [2] *Ibid.* p. 45.

insight coupled with its appropriate feeling and conviction. Anyone can see that miners want higher wages and shorter hours, but that is neither insight nor sympathy. What is lacking in it is the appreciation of detail, the recognition of what the daily routine in a mine is like, of sordid housing, grimy leisure, exhausted slumbers, shortened days and inadequate enjoyments. When these specific points of detail are realised the appropriate feeling comes of itself; and this sympathetic insight should also dispel sentimental illusions. For the knowledge of detail also shows that the miner's toil is not unaccustomed, so that his life is not utter torture, as it would be to those who are not miners; and it suggests that his grimy leisure is not quite so unbearable as it would be to a Congreve or a Halifax. Sympathy of this kind is the result of understanding, not its pilot. It shows the power of the intellect, and not its weakness.

The historical method in economics gives the science a wider range of facts, and makes it easier to distinguish general and lasting conditions from transitory and local ones. It also brings the principle of development to the front, and these matters are best considered by considering history itself. For history is the queen of the human sciences, a reigning consort on the throne of man's larger outlook.

Historians attempt to describe the development of something in a connected narrative. Clio's scroll has room for the biographies of individual men, and there may be histories of rocks or of planets. Historical development, therefore, is not confined to man in society, but history is nothing unless it is a connected narrative, and unless it describes development.

A narrative is a description of events which pays special attention to their sequence in time. It differs, therefore, from logical reasoning; for logical reasoning deals with the connection of principles and not with the consecution of happenings. Indeed, the aphorism that chronology is one of the eyes of history is only half the truth. Chronology belongs to history and does not merely suggest it, and the attempt to prove that chronology should be surpassed and done away in the philosophy

of history is sure to result either in a still-born history, or in a changing logic.

Narrative, therefore, might seem to be as realistic an enterprise as any mind could undertake; but that, perhaps, is a mistake; and we all know something of the difficulties of historical evidence. The notorious circumstance that eye-witnesses seldom agree among themselves does not prove very much, it is true. When the caretaker in Mr Chesterton's story said that no one had called because he did not count the postman, all we can infer is that it is very hard to notice the right things, and those who argue that Mary Magdalene and Salome and the other Mary did not hear anything at the empty tomb because an angel spoke to them, according to S. Matthew: and a young man according to S. Mark: and two men according to S. Luke: do not seem to be on very firm ground. Discrepancies in the accounts of eye-witnesses only prove that it is easy to be mistaken in these matters. On the other hand, there are many cases in which the accounts of eye-witnesses prove very little because the witnesses themselves do not understand the events that are passing. A sailor at the battle of Gravelines, for example, could not be expected to give a connected account of the fight unless he understood the tactics and the strategy of the Tudor admirals.

If that is true of the contemporary observation of a particular event, how much the more is it true of the narrative of a people's doings? The best contemporary historian has to piece together what he has heard rather than to describe what he has seen with his own eyes. Procopius or Gregory of Tours had to do this work of patching, as well as the historians of the late war; and when history is written some generations after the event, the narrative is valueless unless it reveals a firm grasp of principle and a thorough sifting of the evidence.

The difficulties of the latter enterprise are severe enough to test the mettle of the best historian. Historians have to deal with probabilities of the second order. Even if the testimony were certain, the inferences from it would be, for the most part, only probable, and the evidence, in point of fact, is not certain, since the witnesses themselves may be mistaken or insincere.

There seem, therefore, to be no universal canons of historical evidence, although, of course, any particular inference is valueless unless it is logical. Contemporary narratives are not always more trustworthy than later ones, for the later ones may preserve a tradition which is really very accurate indeed; and a tale need not be true just because it seems too strange to have been invented. The rules of evidence in such cases are presumptions at the best, and the most successful surmises of historians are the wonder of untrained observers. Freeman says that he found the key to the whole legal theory of the Norman Conquest in the statement of the Peterborough Chronicle that men bought land from the Conqueror, taken in conjunction with the statement of Domesday that the Abbot of Saint Edmundsbury was given certain lands 'quando Anglici redimebant terras suas[1].'

Historical narratives, then, have to be pieced together; and history, before it is written, is like a jig-saw puzzle where most of the pieces are missing. Even so, however, this species of logical ingenuity can take only a few short steps; and, on any theory, it is but a small part, although an indispensable part, of the historian's equipment. The whole life of a man cannot really be pieced together, and the life of a nation is still less tractable. History cannot attempt to record everything or to conjecture all details. It has to find a principle in the narrative, and to show that the whole story turns on a few salient facts. There is more history in Sir Walter Raleigh's single sentence, "Whosoever commands the sea commands the trade; whosoever commands the trade of the world commands the riches of the world and consequently the world itself[2]," than in the record of half a hundred battles. Historians have to find seminal principles and to trace their development. When they find them they find history; and if they miss them they are only a warning to others.

Accordingly, if historians are tied down to descriptive narrative and the chances of testimony, it is not astonishing that some of their friends should try to save them from this dungeon

[1] *Methods of Historical Study*, pp. 185 *sqq*.

[2] The motto of Sir Julian Corbett's *Drake and the Tudor Navy*.

of realism; and so we are told, on the one hand, that history should abandon her realism and betake herself to art, or, on the other hand, that she must cease from grubbing in the soil and become a philosophy of history.

What is needed in history, it is said, is a pictorial method of representation. The historian's function is to suggest the spirit of an epoch by vivid and telling illustrations. Macaulay's account of the state of England in 1685[1], for example, relies wholly on this method. He consulted the records of the time, to be sure, and he was infinitely better acquainted with them than most of his critics, but his method was pictorial. He gives us Gregory King's estimate of the population of Great Britain, the returns of the excise, the regiments in Charles's standing army, the output of tin in Cornwall, and Sir William Petty's account of labourers' wages, but this information is essentially illustrative, part of a picture, and it is of the same order, in point of method, as the rest of his picture. Macaulay looks for flashes of fact to illuminate the nation's life. The dalesmen, he tells us, kept the secret of the road from Borrowdale to Ravenglas, and every traveller in that region first made his will. Monk ordered his sailors to wheel to the left. Queen Anne saw a herd of five hundred red deer as she travelled to Portsmouth. A rural clergyman nailed up the apricots and curried the coach horses, left the squire's table with the beef and the carrots, and was lucky if he married a waiting-woman. The coffee-rooms smelt like a perfumer's shop. Claude Duval danced a coranto for a lady's ransom. Dryden foretold that the Royal Society would 'reach the globe's last verge and on the lunar world securely pry.' And so on. The only reason for multiplying these examples is that this heaping up of illustrations is an essential part of the method.

Illustration is not reasoning, and yet it enables the mind to connect facts and think of principles. For illustrations are chosen with an eye to their suggestiveness, and they may serve the purposes of historians even if they are fanciful. Squire Western or Humphrey Clinker may teach history as well as John Wilkes or Titus Oates. This manner of portrayal, then,

[1] *History*, chap. III.

needs special study, and we shall meet it again. For the time being, it is enough to say that the use of pictorial methods does not prove that history needs a special mode of knowing. Macaulay's illustrations, numerous as they are, are only a small selection from the facts; but any narrative must select, and thought, as Hegel says, is the great epitomiser. For the rest, the point is psychological rather than logical. To think by way of illustrations is to consider some of the consequences of principles without examining the principles themselves; and this is often more vivid as it is generally less tedious. On the other hand the illustrations are pointless unless they suggest connection; and suggestion, itself, as we have already seen, does not need a peculiar theory of knowledge to itself. Historical illustrations have an objective meaning, and this meaning is their historical value. Let us consider, therefore, whether the meaning is of such a kind that only a philosophy of history can satisfy it.

The philosophy of history has suffered at the hands of its friends. For example, those who know very little about it, and many who would never dream of reading Hegel, are still able to quote some hearsay jesting concerning his remarkable section on the geographical basis of history[1]. They know that he held that world-history must be confined to the temperate zone, and to the old world; that America and Australia are physically and psychically immature because some of the Australian rivers lose themselves in marshes and because the Jesuit friars had to ring a bell at midnight in order to remind the simple Indians of their matrimonial duties; that Americans have to be busy and self-seeking but cannot have a history since their land has only a dream future; that Africa must always be a land of childhood, partly because of its geography and partly because its inhabitants are without self-control, as is proved by the fact that the wives of the King of Dahomey (there were exactly 3,333 of them) are slaughtered *en masse* when the king dies. It is all very ludicrous, to be sure, and Hegel's view that history did not exist before the records of it[2], or that the history

[1] In the concluding section of the Introduction to the *Philosophy of History*.

[2] *Philosophy of History*, Sibree's translation (Bohn), p. 64.

of the world need not mention individuals[1], are *prima facie* absurd. Hegel had a word of praise for great men, it is true, because he was careful to point out that he had anticipated Goethe in adding 'because he is a valet' to the adage that no one is a hero to his valet de chambre[2]. But even in that passage he regards the hero as only the interpreter of advancing Reason, and in general he maintains consistently that history is only the spirit of a people reflectively expressing itself.

Those who smile at these ideas, however, usually feel the need of their own philosophy of history, and perhaps they cannot afford to be quite so contemptuous of Hegel. Hegel tried to incorporate the geographical theory of history in his account of the History of Spirit, and he became absurd by taking it too seriously. He would have been still more absurd, however, if he had accepted it outright. Geography undoubtedly plays a critical part in human history. Climate tells on a people, the sea may be their life, and the great road from Sardis to Susa was the key to the fate of Europe. Geography makes military history repeat itself, and a mountain range may be more despotic than any monarch. But geography, as Hegel saw, cannot be the essence of history, because history, at its lowest rating, is man's use of geography. The economic theory of history, again, is a better philosophy of history because it takes human needs into account; and the migrations of wandering hordes in search of sustenance, or the lust of great communities for naval bases, are probably far more forcible than any other constraining impulse in the life of a people. Still, the economic theory of history is a one-sided affair after all, just because economics is not sociology, and those who follow Augustine, or Bossuet, or Hegel, and regard history as a theophany or as the unfolding of Absolute Spirit may be nearer the truth than the others. Every great history is a philosophy of history too. It traces events to their sources and discovers the seeds of later things. Nothing is philosophy, if this is not.

Those who deny the possibility of a philosophical history maintain either that there can be no pervasive order and prin-

[1] *Philosophy of History*, Sibree's translation (Bohn), p. 70.
[2] *Op. cit.* p. 33.

ciple in the development of societies, or else that any appearance of this order is only superficial. The lives of men and women, it is argued, are ultimately irrational and their behaviour a thing of caprice and hazard. Or, again, it may be held that social history must be without general principles, because society itself is only a specious aggregation of human beings, and because the man always makes the hour, not the hour the man.

The first of these arguments is a gross overstatement. However obscure human personality may be, it at least shows a very marked aggregate similarity in individual dissimilarity. Even opportunism shows few traces of accident except for the good fortune of those who use their chances. The opportunities themselves are certain to occur. It is another thing, of course, to pass from this aggregate regularity to specific prediction and to maintain, for example, that Capital must accomplish its own overthrow in some particular fashion at some particular time. History does not work so. Historians find their principles after the event, and can only grope a little towards the future. But sometimes they can understand after the event, and that is a sufficient rejoinder to this contention.

The second argument is more plausible. A community is not individual in the same sense as its members are, and it is often necessary to expound this truism. Communities, again, follow their leaders quite as often as their leaders follow them, and even the idiosyncrasies of these leaders sometimes have a profound effect. Sidgwick remarks somewhere, I think, that it would have made a great difference to mankind if Mohammed had been fond of wine and indifferent to women; and other instances might easily be cited. On the other hand, the members of a community are so imitative, and so profoundly influenced by one another in their training and aims, that communal life is certainly a reality. For that reason it is idle to discuss whether the hour or the man is the proper object of historical study. The man gives his own bent to the hour. The hour needs the man and finds him sooner or later. British seamanship was what Drake began and Nelson continued. It had the stamp of these seamen upon it, and it would have been different under other leaders. On the other hand, it might not

have been so very different under other admirals; and we can discern its outlines without enquiring too minutely whether England owed more to Drake than Drake owed to England.

History, then, is possible, but how is it possible? Is it, in the last analysis, a narrative of the development of fact, or is fact only the body of history, and history itself the soul of this body? Hegel and Croce[1] take the latter view, and so they reinterpret the nature of knowledge. Knowledge, they argue, is life and not discovery, and history is just man's life become self-conscious. That is why Hegel maintained that history is coeval with annals; for annals are the self-consciousness of spirit; and that is history[2]. According to this view, therefore, the aim of any historian is to grasp the nature of development by living it in his own person. Contemporary narratives are valuable, not on account of the events they record but on account of the life they reveal, and the first duty of a historian of the past is to enter into the life of the past, and to be present in spirit with Socrates at Chaeronea, with Burghley at the Council table, or with some lonely British sentry on the Afghan frontier. History is the torrent of life, not the empty bed which the torrent has left.

This theory is full of confusion. In the first place, life and the record of it are not the same. Life may be lived consciously (and even self-consciously) without annals and without history; and the recorder of life need not participate in the deeds he records. He needs imagination and sympathy, to be sure, but sympathy and imagination participate in life by metaphor only, and they are needed in all the sciences, not only in history. In the second place, a people is not really self-conscious. Men and women are; and if a nation were self-conscious one would suppose that soldiers and statesmen would be the organs of its self-consciousness instead of historians. Nothing is gained by confounding the man of action with his biographer. In the third place, self-consciousness, as we saw in the last chapter, is not a peculiar variety of knowledge in which knowing and

[1] *Logic*, pt II. chap. IV. Cf. Dr H. Wildon Carr, *The Philosophy of Benedetto Croce*, chap. XI.

[2] *Op. cit.* pp. 63, 64.

being are one. If it were, Hegel's philosophical conception of history might be profoundly true despite its subsidiary difficulties; but because it is not his theory falls.

We may conclude, then, that observation and inference are the only instruments of the human sciences, and that a realism of this kind does not need to be supplemented or transfigured by any other variety of knowledge. At the same time, doubts may reasonably linger in the reader's mind, and especially doubts which concern the constructiveness and imaginativeness of scientific knowledge. It is advisable, therefore, to treat these questions somewhat more generally than hitherto.

It must be admitted that the contrast between knowledge as making and knowledge as finding, seems peculiarly hollow on its first aspect. Often, indeed, the choice between these two conceptions appears to be quite indifferent. One can speak equally well of making the right synthesis and of finding the true connection, and it looks as if there were very little philosophy in meeting one's opponents with the remark: "*For* 'constructing,' where possible, *read* 'finding.'" Yet realists must admit, I think, that this curt notice is one of the most compendious and one of the least inadequate ways of putting their main contention. Again, it might seem that the opponents of realism are at liberty to accept this amendment and still to retain their theory. The mind, it may be said, finds the reality of things by assimilating them. Quarrels on this head have a verbal look about them, and, perhaps, not even that. Flaubert, I suppose, was a good judge of the meaning of words, and he wrote: "External reality must enter into us so that it makes us almost cry out for its worthy reproduction. An author always writes well when he has his model crisply before his eyes[1]." The mind, in other words, perceives what it has assimilated, and that is the whole of its business.

On the other hand, the consequences of this theoretical difference are very important indeed. What the mind organises, quite plainly, is just itself, and its constructions, we are told, are ideal constructions, that is to say, constructions of its own ideas. The metaphysical importance of this theory is

[1] *Correspondance*, IIe Série, p. 269.

surely plain enough, and its interpretation of knowledge is most radically distinct from the common one. If knowledge is only fabricating, it is clearly idle to conjecture whether its fabric corresponds to any reality other than itself, for the very thought of any such reality is just another fabrication; and the discovery of things as they are, is even more absurd. For that reason the pragmatists, in their consuming zeal for Formless Logic, disclaim any final or ultimate knowledge of things, and profess to be content with the temporary fabric which M or N has contrived to weave at some given time; and the absolutists tell us that knowledge is just coherence of experience, although they do not usually explain what sort of coherence it is. Indeed, according to all theories of this kind, knowledge is only the regulation and organising of its own material. It may perhaps be controlled by stimuli which affect it *ab extra*, but this control is unknowable simply because it is not itself assimilated or known. According to this philosophy, knowledge always transforms what is given to it, and therefore we can never know the given as it is.

In view of these consequences, it is manifestly essential to examine this 'constructiveness' of knowledge as thoroughly as possible, and I make no apology for calling the reader's attention, once again, to a most elementary point. Even if knowledge is always a construction, this account of it would be incomplete. For knowledge implies the recognition or apprehension of constructions as well as the making of them. When this requisite is clearly understood (and not till then) it is possible to set about to enquire what the marks of constructiveness are; whether everything apprehended has these marks; and, particularly, whether this 'construction' is not usually a mistaken expression, and most of it simply discovery.

'Construction' in theories of knowledge is antithetic to 'givenness,' and philosophers, like black and white artists, work with these two notions as well as they can. The orthodox procedure, indeed, is something like this: We are given very little, and so we have to doctor it; this doctoring is more than a necessary expedient, indeed it outweighs the importance of givenness; it is worth so much more that the givenness

does not count appreciably; the doctoring's the thing, and the given can be doctored away altogether. Some idealists stop at one stage of this philosopher's progress, and others at others; but although the caution of some of them and the boldness of the others are always interesting and sometimes valuable, the most important question of all is the truth of the first of these statements. It is common to argue that the given is sensation at best, and probably something still more obscure; that it must be so primitive as to be pre-natal or pre-human, and therefore must be indescribably meagre; and the like. Our thesis, on the contrary, is that anything which is known is *therefore* given, and so that it is as complex (or as rudimentary) as knowledge itself. That has been the principal contention of this book, and the design of the present chapter is to put it to the test in the least promising departments of knowledge.

The need for imagination in the sciences seems an insurmountable objection but is not really so. Scientific imagination is fundamentally insight, and, in the human sciences, insight allied with sympathy. This captive imagination if we may call it so, is either a profounder analysis than is common, or a greater genius for detecting analogies, or both combined; but unless *all* analysis is opposed to discovery, it is difficult to sustain the thesis that profound analysis must be opposed to it; and unless *every* analogy is a spiritual flight which leaves the earth of discoverable fact behind, it is very hard to show convincingly that remote or subtle analogies must be of this order. In fact, the reverse is true. Analogy is a fumbling, shrouded, tentative discovery of connection, and therefore differs from a connection which has been tested and proved, but this very opposition shows that the two are the same in principle; and if imagination in the sciences is not opposed to realism, the sympathy which ought to accompany it in the human sciences is not opposed to realism either. For sympathy is the feeling which accompanies the appreciation of detail. It is the lively interest which stimulates, and in turn is stimulated by, the minute knowledge of the applications of a social theory.

It may be argued, however, that this captive imagination of the sciences is opposed to the free imagination of art and literature. Don Quixote made a half-beaver of pasteboard, and cleft it in two with the first blow of his sabre. Then he mended it with thin sheets of iron. But he never tested the helmet again, precisely because he was a knight of romance and not an armourer by profession. And there are parables in La Mancha.

The best critics would not argue precisely in these terms, for this way of putting it confuses between imagination and fancy; and the flights of fancy, as we have seen in an earlier chapter, are only a whimsical embroidery of artistic imagination, the sportive hem of its garment. Even so, however, those who accept Coleridge's distinction[1] between imagination and fancy might use a somewhat similar argument. Coleridge defined the imagination as the 'esemplastic' power of the mind which fuses the life of things into one[2], and this faculty, it might seem, is completely overlooked in any realism. Most of the great critics have said the same. For example, Wordsworth's famous description of poetry as 'the breath and finer spirit of all knowledge' assumed, as Coleridge did, that the highest knowledge is an esemplastic thing; and even Flaubert, so often called a realist, probably did not mean anything very different when he said that "poetry is just a way of perceiving the things outside us, a special instrument which sifts material things, and, without changing them, transfigures[3]."

Plainly, the perennial disputes concerning realism in art have no meaning unless the disputants have settled whether or not realism may include imagination. Flaubert, for example, interprets the artistic imagination most realistically, taking it to be a piercing of the veil and the discovery of truth in its essence. "What sustains me," he says, "is the conviction that I am within the truth....An author must write as he feels. He must be sure that he feels *well*; and then he may snap his fingers at anything else on the earth[4]." Meredith, on the other hand, either denies that realism can be imaginative or else allows it a

[1] Cf. chap. IV.
[2] *Biographia Literaria*, chap. XIII.
[3] *Op. cit.* pp. 193, 194.
[4] *Ibid.* p. 204.

pedestrian imagination only. "Between realism and idealism," he says, "there is no natural conflict. This completes that. Realism is the basis of good composition: it implies study, observation, artistic power, and (in those who can do no more) humility. Little writers should be realistic. They would then, at least, do solid work. They afflict the world because they will attempt that it is given to none but noble workmen to achieve. A great genius must necessarily employ ideal means....Men to whom I bow my head (Shakespeare, Goethe; and, in their way, Molière, Cervantes) are realists *au fond*. But they have the broad arms of idealism at command. They give us Earth; but it is earth with an atmosphere[1]." And as a third alternative I may quote a passage from a lesser writer of the present day. "The whole book is a shout of discovery, horrified discovery, of the ugliness of life. It's as if she said: 'Listen! Listen! These things actually happen to some people. Isn't it awful?'...I'll grant you that imagination, is so essentially a quality of youth that the merest rootlet of a reality is enough to set a young artist beanstalk-climbing. But the older he grows, the wiser, the more versed in reality, the less he trusts his imagination, the more in consequence his imagination flags and withers, till he ends...as the recorder merely of his own actual experiences and emotions....Remember how much more Madala dwelt on the sense of loneliness and lovelessness, on the anguish of the loss of something to love her, than on what one might call the—er—official emotions of a betrayed woman. Didn't it strike you? Doesn't that show that she was depending on her experience rather than on her imagination, fitting her own private grief to an imaginary case[2]?"

If realism is restricted to the description of fact, and if we mean by fact what is commonly meant by it, then realism can only supply the artist with some of his material. Realism in romance, for example, would mean those tiresome *minutiae* which every good writer has to reckon with. "I had miserable luck with *St Ives*," Stevenson wrote to Colvin. "Being already half-way through it, a book I had ordered six months ago

[1] Meredith's *Letters*, vol. I. pp. 156–157.

[2] *Legend* by Clemence Dane, pp. 89, 92, 93.

arrives, and I have to change the first half of it from top to bottom. How could I have dreamed the French prisoners were watched over like a female charity school, kept in a grotesque livery, and shaved twice a week? And I had made all my points on the idea that they were unshaved, and clothed anyhow." Writers of romance have to attend to these matters of fact for fear of destroying the illusion in their narratives if they do not. We are sometimes annoyed, to be sure, when facts are thrust upon us clumsily, and it is distressing to know that a lady wrote to Dickens justly complaining that he had no right to describe her physical peculiarities so minutely when he gave Miss Mowcher to the world[1], but there is no good reason why an author should not be a reporter if he likes, or why he should not describe his neighbour's furniture or his father's bathroom as meticulously as he chooses. It is only an accident, however, if this is art, even granting that art may use no other materials and still be art. If Dickens had written a life of his father, or if Scott had, these biographies might have been genuine art, quite as unmistakeably as the picture of Mr Micawber in *David Copperfield* or of Saunders Fairford in *Redgauntlet*. But it is foolish to debate whether an author should confine himself to literal fact, when the purpose of art need not be literal description at all.

The aim of this essay is to consider a certain theory of knowledge. There is no room in it, therefore, for a theory of art unless art and knowledge either overlap or coincide. That, however, is precisely what many philosophers take them to do, and since art is certainly expressive and certainly conveys truth, it is impossible to avoid the problem of artistic presentation without leaving the tale of knowledge half told. *Per contra*, it would be irrelevant to consider art except from this angle. Art touches the theory of knowledge very nearly, but art itself is not a species of knowledge. From the standpoint of knowledge we have to consider what sort of reality is reached in art, and how this reality is a vehicle of knowledge. The other problems of art should be left by the wayside.

The simplest answer to the first of these problems is to say

[1] See a letter from Dickens in Forster's *Life*, vol. III. pp. 2 *sq.*

that artistic presentation is a state of the artist's mind reflected into stone or canvas or print. Scott tells us that he wore the wishing cap and built castles with an unreal trowel; Dickens said that "he could hardly hear his own ideas as they came into his head, and say what they meant[1];" and Flaubert said of his *Saint Antoine* that "he found himself well within his own nature, and so had nothing to do except to go on[2]." It would be a mistake, however, to accept all these statements literally, and to suppose with G. H. Lewes that Dickens's art is only a description of Dickens's private hallucinations[3]. Dickens thought, indeed, that his stories developed with an independent growth of their own. "As to the way in which these characters have opened out," he says, "that is, to me, one of the most surprising processes of the mind in this sort of invention. Given what one knows, what one does not know springs up, and I am as absolutely certain of its being true as I am of the law of gravitation[4]." That is the psychology of Flaubert's *Saint Antoine*, except in so far as Dickens, by referring to the truth of his imaginings, claims more than subjective reality for them. And it is interesting to notice that Flaubert consistently thought that the subjectivity of his mood in *Saint Antoine* was fatal to its art. "Tout doit se faire à froid, posément," he said[5]. And again: "The more a writer is personal the weaker he is. My besetting sin has been to put myself into everything I have done. For example, I am where St Anthony ought to be....The less we feel a thing the better we are able to express it as it is, but we must be able to make ourselves feel it, and that is a kind of vision[6]."

If these accounts can be trusted, it would seem that artistic

[1] Forster's *Life*, vol. I. p. 106.

[2] *Correspondance*, II[e] Série, p. 70.

[3] *Fortnightly Review*, Feb. 1872. This is one of the curiosities of literary criticism.

[4] The reference is to the characters in *Martin Chuzzlewit*. See Forster's *Life*, vol. II. p. 58.

[5] "Je connais ces bals masqués de l'imagination d'où l'on revient avec la mort au cœur, épuisé, ennuyé, n'ayant vu que du faux et débité des sottises; tout doit se faire à froid, posément." *Correspondance*, II[e] Série, p. 175.

[6] *Ibid.* p. 82.

imagination does not seem a thing of merely subjective imagery or private feeling to those who have it, but that they consider it an independent growth which they themselves watch and tend. Art, to be sure, is plastic. Pigments and words are put together, often with labour, and this labour is as constructive as anything could be. Indeed, imagination is plastic because it is esemplastic. Art, then, is creative, and it is a product of the spirit. The guiding idea of the artistic whole, it is true, may be vision and nothing else, but the artist must plan and construct in terms of his guiding idea, and that is a kind of creation, however 'inevitable' the development of the theme and of its incidents may be. On the other hand, we dare not overlook the belief of so many artists that they feel themselves 'dans le vrai' in all their imaginings, and that they breathe the spirit of something larger than themselves which beckons to them and forces them to utter it. Is it not possible, then, that the 'constructiveness' of art is only a secondary thing, and that the first commandment in art is just to accept the beauty that is revealed to a man? There is the highest authority for this view, for it is written in the *Symposium* that "if a man behold beauty with the eye of the mind he will be enabled to bring forth not images of beauty but realities, and bringing forth and nourishing true excellence to become the companion of God and be immortal if mortal man may[1]."

Art, because it is representative, may be a vehicle of knowledge as well as a discovery of beauty, and this representativeness, as we all know, is a very vexed problem. The perfect work of art, it is clear, should be reposeful and complete within itself, but art is also a medium of knowledge, and it may have this function without ceasing to be art. It is well that there need be no conflict here, since the products of art always have a meaning and cannot be denuded of this potency without disaster. *Mansfield Park* is a picture of the times, Sarah Gamp the immortal picture of a type. It is our misfortune that we never met Colonel Dobbin, but from another point of view we might be privileged to meet him every day.

[1] *Symposium*, 212 (Jowett, vol. I. p. 582).

These problems of representation have been somewhat neglected by realists because of the violence of their reaction from theories which take knowledge to be nothing but representation. Realists see so plainly that representation in knowledge cannot be the foundation of it, that they are preoccupied with the non-representative basis of knowledge. It is manifest, as we have seen, that representation cannot be the whole of knowledge, for no one can know that anything represents anything else without apprehending the representative non-representatively, and without apprehending the connection between representative and original non-representatively. On the other hand, the perception of this vital truth, and the inadequacy of any theory which neglects it (as so many theories do) do not absolve realists from dealing with the problem of representative knowledge. Our knowledge must ultimately be based on direct acquaintance with things, but most of it is indirect and works through the medium of signs. Words themselves are signs, and they are also the vehicles of knowledge. And illustrations are signs. It is futile, therefore, to argue as if all knowledge were wordless knowledge, or as if the selection of appropriate illustrations were not a way of conveying a meaning which is true or false.

When symbols express fact, as they must at some point unless they are mere counters, this expressiveness can be recognised and known only if symbol, fact, and the relation between them is recognised and known. Knowledge by symbolic representation, therefore, is the apprehension of symbols subject to the condition that the equivalents of these symbols in fact and the character of their significance can be apprehended at will. This knowledge, to be sure, is very hard to decipher precisely in many cases. It was said of a certain surgeon that he would bind up anything in a Thomas's splint from a broken heart to the break of day, and I defy anyone to tell me what precisely is before his mind when he hears this remark. It is clear, however, that the sounds are not the only objects of our apprehension. Even if Flaubert's dream came true, and it became possible to write books containing nothing but phrases, the allusiveness and suggestiveness of

these phrases would not be utterly verbal. In reading a book, for example, we are aware of the sounds and of the black forms which signify them, but we commonly neglect the letters. We do not neglect the sounds to the same degree, it is true, and our mind is changed as well as our mood according as the sounds are liquid or harsh, but we also attend to the things signified by the sounds, and, indeed, we attend to them chiefly.

What, then, of pictorial representation with brush or pen, imaginary word-painting like Mr Conrad's *Typhoon*, or historical word-pictures like Macaulay's third chapter? The principle in these cases is fundamentally the same as in the others. The skilful selection of incidents and illustrations, to be sure, is only partially symbolic, since these, up to a point, may be directly selective of perceptible fact in the most literal sense. These incidents and illustrations, however, are chosen for their suggestiveness rather than on their own account, and so they are symbols first and foremost. To understand them, therefore, we have to understand the character of meaning; and here we may draw upon earlier discussions. The meaning of all signs is an objective connection. When the connection between the sign and the thing it signifies has been apprehended the sign refers beyond itself, although there need not be any detailed apprehension of the thing which is signified. The reference of the sign, therefore, seems vague and ill-defined, and it may remain so unless a peculiarly resolute effort is made to discover what the sign signifies in detail. Thus in artistic representation the mind lingers over the incidents without following them out, and yet it knows that they do lead somewhere. This attitude is easier than the attempt to follow principles to their roots, and the artist's goal is the ease of the reader or observer (although, as we have seen, that is also his despair). And there is another point. A work of art need not 'stick in its incidents' and illustrations. These are parts of a whole, and the whole may signify as well as its members. But the principle of significance is the same for the whole and for its parts, and this circumstance, consequently, does not need separate analysis.

Any discussion of the larger outlook in philosophy—even a mere outline—must consider religious experience, for that, even more than art, is the chosen way in which the human spirit seeks to free itself from parochial shrewdnesses and the cenotaph of a blind alley. It may be conceded, indeed, that religion is fundamentally more emotional than reflective, and that religious dogma and religious history are rather the result of loyalty to the universe and of emotional acquiescence in the value, unity and rhythm of being than the reason for them. Even so, however, this loyalty and acquiescence may be better guides than any parade of dialectics. Just as love and fellowship, on the whole, may be better indications of the character of our brothers whom we have seen than any recital of their actions or analysis of their dispositions, so the love of the Spirit we have not seen and fellowship with Him may reveal more than libraries of argumentative wisdom. It is probable then (it may even be certain) that God did not choose the rationalists to bring salvation to His people; and the rationalists, for their part, may justly deserve censure for many of their efforts to show that reverence can never clarify, and that mysticism is always pathological or necromantic. Indeed, why should we deny that religious experience, and particularly mystical experience, is fundamentally a new way of knowing? This claim is often made, sometimes, it is true, with diffidence (since mystical descriptions so often are metaphors), but still, on the whole, with a sort of deprecating firmness. Mysticism need not claim to be a philosophy, but it often does[1], and when it does, it claims to be a philosophy based upon the validity, and indeed upon the supremacy, of a distinctive way of knowing. Such knowledge, we are told, is open to everyone

[1] Cf. Inge, *The Philosophy of Plotinus*, vol. I. pp. 3–4. "Mysticism is the pursuit of ultimate, objective truth, or it is nothing 'What the world calls mysticism,' says Coventry Patmore, 'is the science of ultimates, the science of self-evident reality.'...Thus it soon became clear to me that mysticism involves a philosophy and at bottom is a philosophy." *Per contra*, Miss Underhill: "Not to *know about* but to *Be* is the mark of the real practitioner" (*Mysticism*, p. 86). "Mysticism, then, is not an opinion; it is not a philosophy" (*Ibid.* p. 97). But Miss Underhill also quotes Coventry Patmore with approval, and chooses the self-same passage as the motto for Part I of her book.

although it is cultivated by the few only, but mysticism is a distinctive kind of knowledge whether it is catholic or esoteric.

Philosophical mysticism, therefore claims to be a distinctive way of knowing; and it is by far the most important contribution which religion has made to this branch of philosophy. It is necessary, then, to examine these claims which are made so explicitly.

'Mysticism' itself is a vague word, and it is commonly used to describe so much that it describes very little in particular. To some it means the medicine-man and his wizard progeny, the *orendo* of the Iroquois, and the levitations of ecstatic Moslems; to others the strange visions of ascetic vestals, the *umbra viventis luminis* of St Hildegard of Bingen, or the bridal passion of Mechthild of Magdeburg; and to a third party it means the Zohar, the Kabbala, and the Rosicrucians. Psychologists discuss the stigmata of hysterical ecstasy, and the psycho-physics of the trance, or smudge the symbolism of a celibate's dream with a prurient finger. Others, again, regard mystical literature as a record of abnormal experience, curious perhaps, but curiously regular since it shows well-marked periods of spiritual growth whose stages correspond very closely, not only between Catholic and Protestant, man and woman, mediaeval and modern, but also between Orient and Occident.

The psychology of mysticism, however, is not the philosophy of it. Philosophical mystics, to be sure, gladly accept the spiritual biographies of the subjective mystics (as they call them) and maintain that these personal records embody permanent truth with a universal meaning. On the other hand they go to Plotinus (or, perhaps, to Lao-tse) for the philosophy of mysticism, and not to Suso, or Tauler, or Macarius or Nóvikov. Philosophical mystics, it is true, tread the mystic way, even if they do not always time their progress according to the quaint itineraries of the handbooks of devotion. They may show a certain contempt for being in the body, as Plotinus did when he refused to speak of his ancestry, his parentage or his birthplace[1], they may claim esoteric knowledge because

[1] See the *Life* of Porphyry, 1.

of the thoroughness of their purification, they may empty their mind to find the Godhead in it, and they may be contemplative to the point of quietism. These characteristics, however, are common to all mystics. They are not peculiar to philosophical mystics. Philosophical mystics pass through the same experiences as the others, and welcome the records of this companionship; but philosophical mystics are not content with that, for they find knowledge according to a first principle—a cirrus cloud that casts no shadows—where the others find only a wonderful sweetness and a garment of rapture.

"The central doctrine of mysticism," Dr Inge says, "is not that we can see God only in a state of swoon, but that we can see only what we are[1]." That is a negative way of putting it. The positive thesis of philosophical mysticism is that true knowing is a way of being, so that in becoming such and such we therefore know what we are. When these assumptions are granted, the outlines of philosophical mysticism show themselves very clearly. In the first place, it is plain that the only way to see God is to become Him. The mystic must reverse the Incarnation, and become absorbed in the One. In the second place, it is clear that personality, as we commonly interpret it, is incapable of this absorption, and mystics therefore hold that what we call personality is a temporary, superficial, illusory makeshift. We really are identical with the One and the Eternal whatever our commonplace imaginings may declare, and the mystic's task is ultimately to find what he truly is. He finds this, it is said, with the 'logic of the whole personality[2],' purifying his soul from the dross of time and things, and finding that it expands infinitely when these hindrances are cast out into the wilderness of make-believe. Some of the mystics find their goal after an intellectual catharsis, others by prayer and fasting, others by a sage and wilful ignorance, others in a tempest of emotion. But the unitive life beckons to them all.

It seems to be clear that this principle, as the Dean of St Paul's states it, is not an arbitrary gloss on the mystic's creed,

[1] Article 'Neo-Platonism' in Hastings' *Encyclopaedia of Religion and Ethics*, vol. IX. p. 316.

[2] Dr Inge's phrase in his lectures on *Christian Mysticism*, p. 19.

but a terse summary of its cardinal principle. "We can only behold that which we are," Ruysbroek said[1], and Plotinus himself expressed the doctrine with great exactness, for he said: "He who then sees himself, when he sees, will see himself as a simple being, will be united to himself as such, will feel himself become such. We ought not even to say that he will *see*, but he will *be* that which he sees, if indeed it is possible any longer to distinguish seer and seen, and not boldly to affirm that the two are one. In this state the seer does not see, or distinguish, or imagine two things; he becomes another, he ceases to be himself and to belong to himself. He belongs to God and is one with Him, like two concentric circles; they are one when they coincide, and two only when they are separated. It is only in this sense that the Soul is other than God. Therefore this vision is hard to describe. For how can one describe, as other than oneself, that which, when one saw it, seemed to be one with oneself[2]?"

Plotinus admits, just as Hegel admits[3], that we seem to be confronted, in our common knowledge, with something not ourselves which we simply accept and try to decipher; but both of them hold that such knowledge is spurious. Knowledge, they maintain, is not genuine until it is literally the union of mind and thing; and realism, to put it succinctly, is the direct uncompromising denial of this ideal. Realists take that to be final which Hegel and Plotinus take to be marks of inadequacy; for knowledge, according to the realists, is always the discovery of something with which the mind is confronted. The mind is therefore distinct from its object, and an object is not known the better because of its resemblance to mind. The dogma that like can only be known by like is the first fallacy which realists try to expose[4]. The doctrine that *any* knowledge can be the identity of mind and thing is a second and a greater fallacy of the same kind.

[1] Quoted by Miss Underhill, *The Mystic Way*, p. 20.

[2] *Enneads*, VI. ix. Dr Inge's translation, *op. cit.* vol. II. p. 140.

[3] Cf. the Preface and the Introduction to the *Phenomenology*.

[4] Cf. Plotinus, *Enneads*, I. vi. 9 (Mackenna's translation, vol. i. p. 89), "Never did eye see the sun unless it had first become sunlike, and never can the soul have vision of the First Beauty unless itself be beautiful."

In the face of an ultimate conflict of principle, argument is as useless as soft words before a tempest. There can be no *via media* between the doctrine that knowing is a kind of identity with the thing known, and the doctrine that this is precisely what knowing is not. But if concessions are impossible, intransigeant denials are of little account unless they are accompanied by an attempt to consider what may be said on the other side. The mystics and the idealists have a cloud of witnesses to-day, and most of them are very patient in explaining how their opponents have grasped a part of the truth, and yet have fallen short of the truth itself. This patience, therefore, should be met by equal patience on the other side.

It may be argued, then, firstly, that union with and absorption in an object is the ultimate end of emotion and endeavour, and so, by analogy, the ultimate end of knowledge; and, secondly, that when mind attains a certain level of tension it is always self-conscious, so that the mystics, when they attain this stage of being, also and inevitably attain this stage of knowing.

The end of our willing, we are told, is the fruition of desire. Such fruition is just absorption, and the mystic attains his end when he is absorbed into the All. Emotion, again, is the same in principle. Strong emotion, as we say, carries us away. The mind is wholly absorbed in its interest, and mystical feeling is just absorption in the beauty, harmony and life which envelop and encompass the mystic. The existence of such emotions show at one and the same time what the intellect is and how inadequate it is. Knowledge is like literary criticism, a sort of voluntary detachment from complete enjoyment. The critic has to write in a calm mood, contenting himself with the faint memories of his previous enjoyment of beauty. His criticism does not count unless he has lived through the experience of absorption and self-forgetfulness, but he cannot be a critic while he is pulsing with the joy of beauty. Reflection is only the pale ghost of full apprehension and absorption. It is a parasite upon the real experience. It is the *lingua franca* of relaxed minds. And it is important in common affairs precisely because we keep our minds relaxed for nine-tenths of our lives.

Arguments of this kind abound in general literature, and they are certainly held with intense conviction. One would suppose, therefore, that they are better than some of us think. Be that as it may, there are certainly grave difficulties in the premises of them, and the gravest doubt of the conclusion granting the truth of the premises. This theory of the will outstrips sober description. When we resolve to do anything we set ourselves to bring about a change which we believe we can effect, but we may desire and strive for other things than changes in our own person, and we can effect more than a private transformation. We can struggle for the good of others, or for the happiness of posterity, or for the honour of the realm. We really seek these ends, and not merely our personal satisfaction or absorption in them; and those who live for posterity neither expect nor desire absorption in posterity.

The mystic's analysis of feeling, again, is less securely founded than many suppose. Mysticism is the apotheosis of love, and the records of experience testify with surprising unanimity that love is a godlike search for literal union. But is it so? Love looks for harmony; it is careless of itself; it seeks its other. Yet it stops short of absorption, and that is its salvation. If a lover became his beloved, or if creaturely devotion became divinity, the excellence of the lover would be lost and only the excellence of his beloved remain. It is better to think that love achieves its perfection, not by relinquishing a lover's existence, but by attaining a complementary being in which neither the lover nor his beloved is absorbed.

Even granting, however, that absorption is the end of seeking and the consummation of emotion, it is strange to maintain that it is also the end of knowledge. Analogies are manifestly impotent to override a contrast in the facts, and nothing could be plainer than the contrast between knowledge and emotion when emotion is interpreted after the fashion of this argument. If the reflective attitude, detached, freed from tension, *réchauffé*, is just the antithesis of living absorption, surely the conclusion ought to be that reflection is always inadequate and incomplete, and not that reflection, at its highest, forgoes everything that we mean by it. To say that reflection dare not be

impassioned, and also that passion and reflection (at its highest) are one, is too like a flat contradiction to be tolerated. And so we may pass to the other argument.

According to it, there is no difficulty in seeing that the mystic's way of being is also a way of knowing. It is not *our* knowing, to be sure, nor even self-consciousness after *our* pattern, and therefore it has to be described either negatively or figuratively. The One is above Soul and above Existence. It is ineffable and incomprehensible. In knowing it we have to 'unite ourselves in unknowing,' like the pseudo-Dionysius, or, as St Bernard says, "When something from God has momentarily shed its ray upon the mind, immediately, whether for the tempering of this too great radiance or for the sake of imparting it to others, there present themselves certain imaginary likenesses of lower things suited to the meanings which have been imparted from above." None the less, if consciousness at a certain level always includes self-consciousness, it is reasonable to argue that to be one with God is to be united with His Self-omniscience, and so to be one with His being and with His knowing.

This argument is precisely the reverse of the former one. That maintained that absorption means loss of self-consciousness, this maintains that absorption in God is transfigured self-consciousness. On the score of fact, if fact can be spoken of in this connection, the second argument seems nearer the truth, but even if union with an Omniscient Self-consciousness implied participation in Its self-knowing after the manner of Its perfect knowledge, the problem would still remain whether God's self-knowledge must be different in kind from other knowledge. These exalted matters can scarcely be put to the proof; and so we have to consider what we find in experience, and to argue from experience as well as we can. Self-consciousness is plainly a fact of experience, and our former analysis of it ought to help us. If self-consciousness differed in kind from any other form of knowing, the mystic might have very good grounds for his belief that, in the end, knowing and being are one. But since it does not, his contention falls.

EPILOGUE

Ὥσπερ καὶ Θαλῆν ἀστρονομοῦντα, ὦ Θεόδωρε, καὶ ἄνω βλέποντα, πεσόντα εἰς φρέαρ, Θρᾷττά τις ἐμμελὴς καὶ χαρίεσσα θεραπαινὶς ἀποσκῶψαι λέγεται ὡς τὰ μὲν ἐν οὐρανῷ προθυμοῖτο εἰδέναι, τὰ δ' ἔμπροσθεν αὐτοῦ καὶ παρὰ πόδας λανθάνοι αὐτόν. ταὐτὸν δὲ ἁρκεῖ σκῶμμα ἐπὶ πάντας ὅσοι ἐν φιλοσοφίᾳ διάγουσι.

PLATO, *Theaetetus*, 174 *a*.

Long ago, as Thales stood gazing at the stars, he fell into a well; and his handmaiden laughed, saying he was so rapt in the things of heaven that he could not see the earth at his feet. Then Thales called her, for she was witty and comely, and he bade her bring a salve for his hurt, and wine and some bread.

So she tended his hurt, and Thales spoke with her, and said: "Pretty one, dost thou jest at this star-gazing like the rest of the Thracians?" Then the maiden laughed again, and answered, saying: "O subtle Ionian! Canst thou find this salve in the moon, or draw wine from the stars; and how couldst thou live if thine handmaid did not serve thee?"

And Thales said: "Pretty one, how did I find this salve? Hast thou not heard how I foresaw that the harvest of olives would be great beyond all expecting, and how I hired all the olive presses in Miletus and Chios, paying the earnest-money for them, so that, when the harvest came, I could ask for what I would, and take my toll of all the oil that was pressed? And the maiden answered: "Verily thou art a cunning man, yet I would thou didst not cheat the poor. For all men must have oil."

Then Thales said: "The poor need not lack till they die, and we who are not born to riches must seek for riches as we find the means. Yet I would fain have thee see that my star-gazing is not a thing of no account. For because of my learning in the stars I knew that the day would turn into night, and so it befel while the Lydians fought with the Medes. Then the slaughter was stopped, and peace was made, and fathers had not to bury their sons any more. Tell me, was not this a great thing, and did I not find great honour in it?"

And the maiden answered lightly: "Verily thou art wiser than any in Ionia, and thou hast gone into far countries, and hast learned to tell how far away the ships be from thy steep tower, and by thy learning thou didst turn the Halys from its course so that the army of Croesus passed it in safety. For these things I honour thee, although I am but a Thracian and thine handmaid. Yet thou art foolish and fallest into wells, so that I must tend thee as a mother tends a child. And this thing passes my wit, and thy wit too, O sapient infant! And now I must leave thee, for thy star-gazing does not bake bread, and thou wilt chide me an I bring thee not thy bread at sunrise, even if thy stupid stars pay no heed. And, prithee, keep away from the well."

So the maiden left him, and Thales mused awhile and fell asleep. And as he slept he saw one coming to him with glass over his eyes and clad in leather. Then the stranger said: "Arise, and come with me." So Thales arose and went with the stranger, and they entered into a strange chariot with great sails fastened to it. And lo! they rose in the air, and sped over the land, and the noise of their going was as the droning of countless swarms of bees.

And the stranger showed Thales the source of the Nile, whereon Thales had often pondered, and huge armies, and many other marvels. Then Thales rejoiced because he saw what men had done when they looked beyond their feet, and sought out cunning devices, even as he had done.

And he spoke to the stranger, thanking him, and said: "I would fain know more of this knowledge, so that the oracles can learn of me and kings do my bidding." And the stranger said: "I shall take thee to a far country beyond the Middle Sea, and the sages of that country will tell thee these things. But, first, I must consult my own oracle."

Then the stranger put a band over his ears, and Thales heard the sound of tapping. And after a little while the stranger told him that the sages in the far country were ready to receive him. And Thales marvelled greatly at this oracle, but he kept silence.

So they journeyed many hundreds of leagues through the

air, and the stranger told Thales how he kept the course. And Thales understood him and was glad. And when they came to the far country, they lighted on a hill above a river. And there was a palace on the hill and trees around it. Then the stranger left Thales at the gates of the palace, and Thales went to the door and asked if he might see the king. But the chamberlain told him that the house was no palace, only the abode of a sage, and that the sage would rejoice to welcome him. So Thales entered, and the sage told him how he read the stars, and showed him glossy pictures of the stars, and many charts, and great tubes to see them withal.

Then Thales marvelled and enquired concerning the stars, and how men could foretell their courses. And the sage showed him many figures and diagrams, and explained the proofs of them. And Thales said: "Often did I dream of these things, and now thou hast shown them to me. And this knowledge I count higher than any invention. For it is godlike. So now, I pray thee, tell me of the gods, and show me how men fare. For the knowledge of the gods is the most excellent of all knowledge; and yet I am a man, and I would learn how men are made happier by this wonderful knowledge and these many inventions."

And the sage said: "I can show thee mankind, but thou must seek other sages to learn of the gods." So he showed Thales a great city, and the men in it. And the men seemed to Thales to be weary, and dingy, and busy without zest, and clad in ugly raiment. And Thales said: "These be slaves, and I would fain see the rulers of the city." But the sage told him that these were no bondmen, but free, and that there were rulers among them. Then the heart of Thales was heavy within him, and he held his peace.

So the sage took Thales to see those other sages who might tell him of philosophy and of the gods. They journeyed in a chariot without horses, and the sages received Thales gladly.

Now the first sage was bearded and courtly, and the second sage was ruddy and hard of countenance and quick in his movements, and the third sage was lean and tired and wistful. And

all the sages were clad like the men in the city. And they burned strange incense.

Then Thales enquired of them concerning the gods. And the first sage said that all things were one, and that this was the sum of our knowing. And the second said that knowing was doing, and the truth what men had made. And the third sage said that nothing could be known concerning the gods, and that all knowledge was but a learned fable whereat a wise man should be merry.

Then Thales was sad because these sages had learned so little concerning the gods. For the first, he thought, did not reason closely, though the sound of his words was good; and the third was too weary to think; and the second was little better than the Thracian handmaid. So Thales bowed to the sages and withdrew himself from them.

And after he left them, he mused very sadly, thinking that cunning inventions had increased, and much knowledge concerning numbers and the stars, and yet that he had seen men to be no happier than they were in Miletus, and that he had found they knew very little of the gods. But Thales knew that this knowledge was the most precious of all excellent things. And he knew that if men walked warily in their knowing there was nothing they might not find out.

Then the vision faded; and when Thales awoke the stars were pale in the sky, and all was still save for the note of a grasshopper near at hand. So Thales called his handmaid and bade her bring him much wine. For he was weary, he said, and had seen strange matters in a vision. And the girl laughed again.

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CAMBRIDGE: PRINTED BY J. B. PEACE, M.A., AT THE UNIVERSITY PRESS